Obstacles and Challenges in the Use of E-Learning from the Perspective of University Staff Members at Maysan University

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The study aimed to explore and understand the obstacles of e-learning from the perspective of the faculty members in Misan University. The research was limited to the faculty of education and the faculty of dentistry as they are the newest faculties in Misan university and they also provided research samples which reached 100 samples consisting of (50) human specialty and (50) scientific specialty for the academic year (2018-2019). The researcher prepared a questionnaire consist of (30) clauses with everyone having five alternative answers (strongly agree, agree, neither, disagree, strongly disagree) then the data processed statistically using the Pearson and Spearman correlation coefficient. It was concluded that the e-learning is an integrated educational system in the delivery of science and knowledge to the learners without time and place restrictions. The researcher recommends the faculty members to take training courses to help them in teaching and to spread the electronic culture between the society members to achieve the most interactive type of education. The researcher suggests making similar studies in other faculties in Misan university, and experimental study in the effectiveness of e-learning in some variables such as achievement and thinking.

Key words: E-learning –faculty members –Misan - university.

Introduction

E-learning is considered as one of the new trends in education systems. E-learning is the most commonly used term but we also use other terms such as online learning, Electronic Education, Web Based Education. E-learning refers to learning by using internet technology where content is spread throughout the internet or the extranet and this method allows students to create sources from links that they can use outside of sessions (Damees, 2011).
Research problems

1) What are the obstacles in using E-learning from the faculty member’s perspective in Misan University?
2) Are the obstacles that the faculty members face while using e-learning varied by specialty?
3) What are the obstacles in using e-learning that faculty members face according to the difference between the university colleges?

Aim of the study

1) Identify the most important obstacles in using e-learning at the Misan University from the faculty member perspective in scientific and human specialisation.
2) Identify the obstacles from the males and females perspective in the scientific specialisation.
3) Identify the obstacles from the males and females perspective in the humanistic specialisation.

Literature Review

E-Learning Types

- Synchronous e-learning (Azmy, 2014)
- Asynchronous e-learning (Zeitoun, 2007)

E-Learning Elements

The elements of e-learning consist of the teacher, the student, the electronic content, the electronic libraries, the electronic books and magazines, the email and the electronic conferences. (Altwadry, 2004; Kotaite, 2009)

E-Learning Techniques

This era is witnessing continuous development in technological means used in the educational process which consist of three main techniques: firstly sound technology which consists of two types the first is interactive and the second is static sound tools. Secondly visualisations. Thirdly the computer and its networks. (Kandil, 2006)
The Component of E-Learning

- The educational system: this system provides digital courses and the student interacts with it in a synchronous and asynchronous ways with feedback. (Salem, 2004)
- Administrative system: this is about the administrative side of e-learning and this system consists of: admission, electronic courses, virtual semester, electronic tests, e-mail, educational discussion forum, electronic monitoring (Abdeen, 2013).

E-Learning Design

The e-learning is an integrated system consisting of a set of components and elements that makes this system work (Estetah, 2007). The component of the e-learning system consists of 1-system environment, 2-input, 3-system processes, 4-outputs, 5-feedbacks. (Altamemy, 2018)

E-Learning Phases

- Analysis phase: in this phase all objectives, content, the characteristics of students’ application and their educational needs make sure that the needs are in line with possibilities. (Eltayeb, 2016)
- Design phase: this phase includes content design, screens, sequencing and learning strategies. (Al-Shammari, 2007)
- Development phase: this phase includes programming, launching processes, using media and feedback. (Altamemy, 2018).

E-Learning Importance

- E-learning helps the students with special needs and for those unable to attend daily. (Al-Hudhaifi, 2008)
- Supporting new modern teaching ways depends on the students.
- Benefiting the population of developing communities.
- Makes it easier to learn foreign languages.
- Reduces learning costs. (Aziz, 1990)
- Updates educational courses according to the quick changes happening in digital knowledge.
- Easy access to information and knowledge resources.
- Enhances the education level.
- Meets the growing demand for education and training (Kotaite, 2009).
E-Learning Objectives

- Provides the opportunity to the students to deal with the open world through the information networks.
- Continues to use the computer as a supporting tool.
- Enriches the curriculum by following the style of play using the computers.
- Enhances the curriculum through doing electronic activities. (Amer, 2007)
- Provides a rich multi-source interactive environment that serves the educational process in all its axes.
- Offers the possibility of replacing the shortage of academic staff.
- Prepares a generation capable of handling technology. (Allam, 2000)
- Builds networks for each school through which parents can communicate with teachers and management.
- Supports schools to connect with educational and government institutions in an organised and easy way. (Altamemy, 2018)

Benefits of E-Learning

- Makes it easy for students to contact each other and to contact the school.
- The students feel equal.
- Offers the possibility of modifying the method of teaching. (Jaber, 1998)
- Provides curriculum all day long and seven days a week.
- Offers many and easy ways of assessment of student development.
- Does not rely on face-to-face attendance (Al-Louh, 2011)

Characteristics of e-learning

- To reduce the cost of education.
- To reduce the overall teaching time.
- To create flexibility in progress (Al-Zaher, 1999).
- Makes education more interesting and fun than traditional education.
- Allows the possibility of reviewing a large amount of information.
- Keeps up with amazing scientific development taking place in all fields of knowledge. (Al-Seif, 2009).
- Takes into account the individual differences of each learner, as a result of that every student has his own device.
- Encourages self-education. (Eltayeb, 2016)
E-Learning Requirements

- Makes the technological means and tools available, and teachers and students have easy access.
- Assists teachers and learners by supplying specialists. (Gerges, 2005).
- Makes the classrooms and facilities upgrade the technology demands.
- Practises the skills of dealing with information and communication technology. (Al-Mubarak, 2009).
- Provides technical personnel specialised in the operation and maintenance of communication technology equipment.
- Develops plans and clear approaches to apply e-learning. (Al-Hailah, 2003)

Negative Points in E-Learning

- E-learning needs intensive efforts.
- Reduces the role of the teacher although he is an important educational supervisor.
- Weakens the role of the school as a social system. (Jawadi, 2006).
- The students tire of dealing with media and do not take it seriously.
- Cost factor in production and maintenance.
- Focuses on the cognitive part of the educational process more than the skill and emotional side. (Hamdan, 2007).
- Creates difficulties in the interaction between the students and the interaction between the students and their teachers.
- Focuses on the senses of hearing and sight without the rest of the senses such as smell and touch.

E-Learning Obstacles

- Obstacles belonging to the students: some of the students have weak computer abilities. Other students are blocked from logging into websites and solving the exercises and being able to send them to the teachers through the website due to lack of understanding in how to deal with the site. They are frequently afraid of being punished if they make a mistake. There can be a lack of e-learning skills and a lack of sufficient awareness among students about the importance of e-learning. (Hawamdeh, 2011).
- Obstacles belonging to the teachers: some of the teachers have weak computer abilities and use modern techniques. There can be a lack of professional teachers in the design of e-learning and deficiencies in the preparation of programs so that the teachers have less skills
in dealing with modern technology and weakness in persuading the teacher of the importance of e-learning. (Al-Shammari, 2007).

- Obstacles belonging to the educational institution: The lack of clarity in the objectives for e-learning when applied in schools and universities, a lack of electronic strategy and unsuitable elements in the school environment. (Zeitoun, 2005).
- Obstacles belonging to the used technique: the loading process for websites that contain graphics or video or audio may take a lot of time. Keeping up with quick developments of technologies can be challenging. There can be irresponsibility in ethical control. There is lack of educational software in Arabic. (Salama, 2005).

The Role of the Teacher in E-Learning

- Awareness of the characteristics and qualities of each learner is taught through continuous interaction between teacher and student, and encourages interaction between the learner and the outside world.
- To work efficiently as a guide and facilitator to reach the desired knowledge. (Aziz, 1990).
- To use teaching skills that take into account the diverse needs of learners and individual differences between them. The teacher should use the skills of a positive interlocutor with the abilities of good listening and respecting students opinions. (Al-Louh, 2011).

The Role of the Student in E-Learning

- The use of computer, internet and e-mail.
- Self-education.
- The ability to search for specific scientific material. (Eltayeb, 2016).
- The ability to determine the information extracted from these sources and to choose the appropriate ones.
- The ability to interact with others electronically. (Kotaite, 2009).

Previous Studies

** Arab Studies:

Study (Salama, 2005):

Salama addressed the integrity of a study (the effect of using the Internet on the academic achievement of Al-Quds Open University students) using the experimental approach in his study. The study sample consisted of (72) students, including (34) students and (38) students, and yielded several results, the most important being the presence of Statistically significant teams in the overall arithmetic mean on the achievement test which were in favour of the experimental group. The study also demonstrated that the group of students who used the
Internet was the better performers than the group of students who studied in the traditional way. (Salama, 2005, pp. 170-190)

**Study (Al-Seif, 2009):**

(The availability of adequate e-learning, its obstacles and methods of its development from the viewpoint of faculty members in the College of Education at King Saud University) This study was prepared to reveal the level of qualifications of female faculty members in all realms of education at King Saud University from their point of view. where the study sample reached (153) A member, and The study used the descriptive approach and the study tool consisted of a questionnaire of (108) paragraphs and was applied as an exploratory sample of (30). The study showed that the most important obstacles that faculty members faced were large administrative and teaching burdens, and opposing academic associations, with training programs provided inside and outside the university, and the difficulty of electronic courses. (Al-Seef, 2009, pp. 3-149).

**Study (Al-Hawamdeh, 2011):**

This study aimed to uncover (obstacles to the use of e-learning from the viewpoint of the faculty members at Al-Balqa Applied University) where the researcher used the descriptive approach. The study sample consisted of (96) members of the faculty at Irbid University College and Al-Hosn University College. The study tool consisted of a questionnaire, and the results of the study after being analysed by statistical methods showed that the administrative and material aspects are the biggest obstacles, followed by obstacles related to e-learning itself, while the obstacles related to the teacher and the student came in ranking third. The results of the study showed that there are no statistically significant differences among the averages of the faculty members’ assessments, the scientific academic disciplines and of faculty members literary disciplines in the obstacles to using e-learning. (Al-Hawamdeh, 2011, pp. 803-804)

**Foreign Studies**

**Study (Allen, 1998)**

This study sought (investigating the effectiveness of multimedia programming in the achievement of students of the University of Texas in the microbiology course and their retention in learning) as well as their attitudes towards the use of computers and multimedia in teaching microbiology content. The number of the sample population was (76) students divided equally into two control and experimental groups, The results of the study, which lasted (16) weeks, revealed the presence of statistically significant differences in favour of the experimental group that studied multimedia. The control group was studied in the usual way in
the achievement and retention of learning in regards to the computer. (Al-Hudhaifi, 2008, p. 18)

**Study (Anderson, 2008)**

(To identify the most prominent challenges in the e-learning course in Sri Lanka) This study included (1887) people, information was collected from 2004 to 2007 and covers the opinions of students and faculty. The quantitative method was used to determine the most important factors, followed by a qualitative analysis to explain why these factors are important. The study identified seven major challenges in the following areas: student assistance, flexibility, learning and teaching activities, inputs (infrastructure and connectivity with the computer network), trust, academia (student quality, topics taught previously), local language, directions. (Al-Hersh et al., 2010, p. 31)

**Extent of the benefit from previous studies by reviewing:**

1) The Objectives
2) The sample
3) The search tools
4) The Statistical means
5) The Results

**Research Methodology**

- The researcher adopted the descriptive approach.
- The research community consists of (678) teachers of the University of Misan for the academic year (2018-2019).
- The researcher identified the research sample as professors of the Faculty of Education and Faculty of Dentistry. The number of professors of the two faculties is (100).
- The researcher prepared a questionnaire that included (30) paragraphs by reviewing a set of previous studies and research related to the subject such as the study of (Salama, 2005), (Mohammed, 2006) and the study of (Hawamdeh, 2011).
- For the purpose of achieving the honesty of the tool the researcher relied on extraction of virtual honesty.
- Using the Pearson and Spearman correlation coefficient as a statistical tool, it was found that the Pearson coefficient is (0.85) which is statistically significant.
- Research data was processed using SPSS program (Al-Zahir, 1999).
Results

**Table 1:** The results of the T-test of the obstacles of using e-learning for each major.

<table>
<thead>
<tr>
<th>Major</th>
<th>Samples number</th>
<th>Arithmetic mean</th>
<th>Standard deviation</th>
<th>Freedom degree</th>
<th>T value</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanity</td>
<td>50</td>
<td>95.14</td>
<td>14.71</td>
<td>49</td>
<td>28.16</td>
<td>2.02</td>
</tr>
<tr>
<td>Practical</td>
<td>50</td>
<td>83.68</td>
<td>18.55</td>
<td>20.61</td>
<td>2.02</td>
<td></td>
</tr>
</tbody>
</table>

Table (1) shows the results of the T-test of the obstacles of using e-learning for each major (human, scientific) with a level of significance (0.05) and a degree of freedom (49). The arithmetic mean of scientific disciplines was (83.68) with standard deviation (18.55) and the calculated T value (20.61), the tabular T value was (2.02) which is statistically significant.

**Table 2:** T-test of the obstacles of using e-learning between scientific and humanitarian majors.

<table>
<thead>
<tr>
<th>Significance level</th>
<th>T value</th>
<th>Freedom degree</th>
<th>Samples number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tabular</td>
<td>Calculated</td>
<td></td>
</tr>
<tr>
<td>Statistically</td>
<td>1.98</td>
<td>2.17</td>
<td>98</td>
</tr>
</tbody>
</table>

Table (2) shows that there are statistically significant differences between scientific and human majors at the level of (0.05) and the degree of freedom (98). The calculated T value is (2.17), while the tabular T value is (1.98), so we find that the T value is greater than the tabular. This demonstrates that there are more obstacles in e-learning among the humanities than the scientific according to the arithmetic circles shown.

**Table 3:** T - Test of the Obstacles of Using E - Learning in Humanities by Gender.

<table>
<thead>
<tr>
<th>Significance level</th>
<th>T value</th>
<th>Freedom degree</th>
<th>Standard deviation</th>
<th>Arithmeti c mean</th>
<th>Samples number</th>
<th>Sex</th>
<th>Major</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tabular</td>
<td>Calculated</td>
<td></td>
<td>Arithmeti c mean</td>
<td>Samples number</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not statistically</td>
<td>2.01</td>
<td>0.01</td>
<td>48</td>
<td>1.35</td>
<td>95.10</td>
<td>25</td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.72</td>
<td>95.00</td>
<td>25</td>
<td>Female</td>
</tr>
</tbody>
</table>

Table (3) shows that there are no significant statistical differences between males and females in the human specialties at the level of significance (0.05) and the degree of freedom (48) if the mean for males (95.10) with standard deviation (1.35), while the mean for females (95.00). The
calculated T value was (0.01), which is smaller than the spreadsheet (2.01). And this shows the obstacles of e-learning are almost the same between the males and females.

Table 4: T - test of the obstacles of using e-learning in scientific disciplines by gender.

<table>
<thead>
<tr>
<th>Significance level</th>
<th>T value</th>
<th>Freedom degree</th>
<th>Standard deviation</th>
<th>Arithmetic mean</th>
<th>Samples number</th>
<th>Sex</th>
<th>Major</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tabular</td>
<td>2.01</td>
<td>48</td>
<td>1.69</td>
<td>86.70</td>
<td>25</td>
<td>Male</td>
<td>Practically</td>
</tr>
<tr>
<td>Calculated</td>
<td>1.58</td>
<td></td>
<td>2.02</td>
<td>82.00</td>
<td>25</td>
<td>Female</td>
<td></td>
</tr>
</tbody>
</table>

As shown in Table (4), there are no statistically significant differences between males and females in scientific major at the level of significance (0.05) and the degree of freedom (48) where the mean for males (86.70) standard deviation (1.69), while the mean for females (82.00) The calculated T value was (1.58) which is smaller than the tabular that reached (2.02). This shows that the obstacles of e-learning in scientific disciplines are similar in males and females.

Conclusions

1. Most researchers agree that there are many obstacles that stand in the way of the application of e-learning, these are (financial, physical, time and place).
2. There are also obstacles to the use of e-learning for humanities more than scientific major and the reason is due to the nature of the curriculum being taught.

Recommendations

1. Provide the necessary financial allocations to provide modern technologies.
2. Work to increase attention to infrastructure and technical equipment and technology in order to create appropriate conditions for teachers to use the system of e-learning in teaching.
3. Develop training courses for faculty members to take full advantage of e-learning and to use it in teaching.
4. It is important to apply e-learning in an environment that blends with the traditional, so that traditional education and e-learning can be complementary to each other.
5. Work to spread the electronic culture among members of the community to achieve the greatest amount of interaction with this type of education.
6. Make further studies into the field of e-learning and any obstacles of application from the point of view of the administrators of the university and the students.
7. Make a field study based on the observation method to identify the reality and requirements of e-learning at Misan University.
8. Make an experimental study on the impact of the application of e-learning on the attitudes of Misan University students towards the teaching profession.
9. Make an experimental study to know the effectiveness of e-learning with some variables such as achievement and thinking.
10. Make a similar study on other faculties such as law, medicine and pharmacy.
11. Make similar studies for the current research on other student samples, comparing their results with the results of the current research.
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