

## Faculty of Nursing Teaching Staff members and Students Attitudes toward e-learning

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**Abstract:** *E-learning has been suggested as an alternative approach that can provide graduates with a wide range of academic and employability skills. This study aimed to identify the attitudes of students and teaching staff in Faculty of Nursing, Assiut University toward e-learning. The present study conducted at Faculty of Nursing, Assiut University using a descriptive study design. The subjects were all teaching staff who volunteered to participate in the study (n= 90) and 650 students from the four levels at Faculty of Nursing, Assiut University who were selected using systemic random sampling technique, they constitute 50 % from the total numbers of students recruited at (2014-2015) academic year. Two tools were used in this study, first tool is Attitude towards electronic learning scale for teaching staff, and the second tool is Student attitudes towards e-learning scale for data collection.*

**Results:** *More than two-thirds of teaching staff members have positive attitude towards e. learning, also, the studied students have positive attitude towards e. learning. All of the e-learning domains among the studied nursing students had statistical significant differences at P=0.001.*

**Recommendations:** *All teaching staff should be encouraged to adopt e. learning strategies in their teaching courses. Future research using qualitative techniques to identify problems which appear in the use of ICT for e-learning. Maximizing the use of e. learning strategy in other non-nursing subjects.*

**Key words:** *Nursing Students, Teaching Staff members, Attitude, e-learning.*

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### I. Introduction

Technological advancement has led to important changes in the way education is being imparted. Evolution of internet and advancement in computer technology has led to new approaches in learning and training which are referred to as e-Learning (Suri & Sharma,2013). The rapid development, innovation and changes in information communication technology (ICT) have influenced teaching and learning praxis considerably ( Krishnakumar & Rajesh Kumar, 2011).

Ruiz et al (2006) defined e-learning as the use of the internet and computer-based technologies to facilitate teaching and learning. Some staff defined e-learning as the use of "e" electronic technology in education, and others felt that it was defined pedagogically, with lecture notes placed on a website not being e-learning. The lack of a clear definition of e-learning makes the implementation of an e-learning strategy difficult with staff not sharing a common understanding or a uniform vision.

The term e-learning might be creating a subconscious barrier with staff who claims to be less confident and less computer literate. It would be interesting to debate whether "e learning" should be dropped or whether it is useful and still required to maintain a high profile for the adoption of new technologies within universities, and how to most effectively use them in teaching and learning.

The use of e-learning contrasts widely between universities in the UK, and can range from the simple provision of course content on-line (handbooks and lecture slides) to the use of content management systems, or virtual learning environments (VLEs) to provide synchronous or asynchronous learning and assessment (Ruiz et al 2006). An initiative for e-learning in Egypt was first launched following the Davos Forum held in 2005 (Abu Alam, 2005). Since then, there has been a growing interest in using modern technologies to deliver instruction and facilitate the process of teaching and learning. Many universities, in Egypt, have adopted e-learning and embedded it in their educational system.

Electronic learning (e-learning) is an encompassing term generally used to refer to computer enhanced learning. It may include the use of web-based teaching materials and hypermedia in general, multimedia CD-ROMs or web sites, discussion boards, collaborative software, e-mail, blogs, wifis, text chat, computer aided assessment, educational animation, simulations, games, learning management software, with possibly a combination of different methods being used. Along with the term e-learning technology and educational

technology, the term is generally used to refer to the use of technology in learning in a much broader sense than the computer-based training or computer aided instruction of the 1980s. It is also broader than the terms Online Learning or Online Education which generally refer to purely web-based learning. As technology advances, so the definition and scope of e-learning evolves (Deepak & Srivastava, 2005, Ruiz et al, 2006 & Sadik, 2007).

The trend of using e-learning as learning and/or teaching tool is now rapidly expanding into education. E-learning is the new wave in learning strategy (Shu-Sheng Liaw et al., 2007). Through innovative use of modern technology, e-learning not only revolutionizes education and makes it more accessible, it also brings formidable challenges for instructors and learners. Educational institutions should be highly computerized, and all teachers should be able to use the technology to enhance their working methods (Elsaadani, 2012).

In addition, the term e-learning covers a broad spectrum of pedagogic tools and approaches that continues to evolve to meet the needs of students and educators. With the global communication and internet connection speed, web content has grown richer and more interactive for users (Aixia and Wang, 2011). E-learning systems provide an additional, more flexible means of communicating that enables students to interact easily with others (Kar et.al,2014). Also, E-learning presents an opportunity to enhance learning as to create environments where students and teachers can share knowledge (Alhabahba, et.al, 2012).

The advantages of e-learning can be seen in the long run, the acquired experience in e-learning will provide a strategic opportunity for the institution to enter the new field of education. Similarly, this system enables students to access diverse contents any time and from any location. This gives students more control over their learning experience, enabling them to gather the materials they need and study when they have time to do so (Bhatia, 2011). The advent of new and advanced information and communication technologies can very well be applied in the context of Higher Education. The Higher Education learners are in need of enriched content, interaction with the faculty and if possible with fellow learners. This could be achieved by the new communication technologies (Mahdizadah et.al, 2008, and Krishnakumar & Rajesh Kumar, 2011).

One of the most critical issues in developing and maximizing the benefits of ICT in teaching and learning work is the level of confidence and acceptance of academic staff in using ICT to gain its benefits in their work. Teaching staff must have positive computer attitudes and feels self-efficacious in using them in order to be effective users of ICT and be models for students' computer use (Elsaadani, 2012 & Elsaadani, 2014). Attitude is defined as an individual's positive or negative feelings about performing target behavior (Palmer & Holt, 2009). This implies that learners' positive or negative feelings about their participation in e-learning activities through the use of computers would directly influence their behavior in using online learning for different purposes. Understanding students' attitudes toward e-learning can help determine the extent to which students utilize the e-learning system in campus and to direct online courses towards the aims of quality assurance in education (Ong & Lai, 2006). Measuring attitude and efforts to improve attitude towards technology is very much essential to affect any change through technology (Krishnakumar & Rajesh Kumar, 2011).

### **Significance of the study**

E-learning is now emerging as the advance paradigm for higher education. Moreover, e-learning platform based on network, promotes personal knowledge accumulation and group knowledge sharing. This can improve learning efficiency, facilitate the innovation of knowledge, and then enhance the core competitiveness of individual and group. So, it is very important to design an efficient e-learning platform for teaching-learning resources, and administration for higher education. Also, several researchers indicated that in a learning environment technology is to a large extent affected by the teaching staff and students' perspectives, attitude and intention to use this kind of leaning tool (Kester et al., 2007 & Alhabahba et al., 2012). Research has shown that the adoption, diffusion and sustained use of ICT in teaching and learning are largely dependent on the attitudes of academic staff (Panda & Mishra, 2007).

### **Aim of the study**

This study is designed to measure the attitudes of Faculty of Nursing students' and teaching staff toward e-learning technologies.

### **Research question**

1. What is the attitude of students at Faculty of Nursing, Assiut University towards applying e-learning?
2. What is the attitude of academic staff at Faculty of Nursing, Assiut University towards applying e-learning?

## **II. Subjects and Methods**

**Study design:** A descriptive design was used in the present study.

**Setting:** The present study was conducted at Faculty of Nursing – Assiut University.

**Subjects: First:** A purposive sample of all teaching staff at Faculty of Nursing – Assiut University who agreed to participate in the study were recruited (n= 90). **Second:** A systemic random sample of half of the total numbers of students from the first to the fourth year at the academic year (2014-2015) was included in the study. Number of randomly selected students from first year was 150 students, 200 from second year, 200 from third year and 100 students from fourth year. The total number of students was 650 students. The age of the studied students ranged from 18 to 23 years.

**Study tools:** There were two tools used in the present study:

**Tool (1).** "Attitudes toward electronic learning of teaching staff scale" that was developed by **Lal, Z. (2010)**. It consisted of 20 items, the scoring system of this part was five point likert scale ranged from strongly agree (5) to strongly disagree(1).The scores of the items were summed –up and converted into percent score. The teaching staff attitude towards e-learning was considered positive if the total percent score was equal to 70% or more and considered negative if less than 70%.

**Tool (2):** Student attitudes towards e-learning scale, which was developed by **pattern Nu'man & Al-Muswi, (2014)** and comprised of 44 items and divided into three domains: First domain related to advantages and disadvantages of e-learning use (10 items), the second domain related to student experience in using e-learning at Campus (22 items), and the third domain related to technical & pedagogical support at campus (12 items). The scoring system of this part was five point likert scale ranged from strongly agree (5) to strongly disagree (1). Half of the items were phrased in a negative direction. For positive items, score of 5 was given for strongly agree, 4 for agree, 3 for undecided, 2 for disagree and 1for strongly disagree. Scores for the negative items of the scale were assigned in the opposite direction. The items of the scale were originally developed by **Nu'man & Al-Muswi, (2014)** in Arabic the translated into English. This English version was subsequently back-translated into Arabic by an independent bilingual professor of education. The reliability of the study tools was measured for internal consistency using Cronbach alpha coefficient method  $\alpha = 0.920$  which indicated high degree of reliability. The validity was measured by five experts in the field of education for face and content validity. The students' attitude towards e-learning was considered positive if the total percent score was equal to 70% or more and considered negative if less than 70%.

**Pilot study:** The pilot study also served to test the feasibility, clarity and practicability of the data collection tool. Also, the pilot helped the researchers to estimate the time needed to collect the data. It was carried out on 20 students from the first year. The pilot study sample was excluded from the total sample. Data collected from the pilot study were reviewed prior to the finalization of the data collection tool and all the required modifications were done.

**Ethical considerations:** All the relevant principles of ethics in research were followed. The study protocol was approved by the pertinent authority. Participants' consent to participate was obtained after informing them about their rights to participate, refuse, or withdraw at any time. Total confidentiality of any obtained information was ensured. The study questionnaire doesn't entail any harmful effects on participants.

### **Fieldwork**

An official permission was obtained from the Dean of the Faculty of Nursing, Assiut University before embarking on the study. After finalizing the study tools, the actual data collection and data analysis started in November 2014 and ended in February 2015. The self-administered questionnaire was filled by the teaching staff who agreed to participate in the study. They were given the **Lal, Z. (2010)** tool and asked to fill it out and return it in the same setting or at most the next day. The researchers were available for any clarifications.

Regarding the students, according to their academic schedule, the students were given time -at the end of a nursing lecture- to fill the questionnaire after explaining the purpose of the study. Clarifications were done when needed.

### **Statistical analysis**

Data entry and statistical analysis were done using SPSS 16.0 statistical software package. Data were presented using descriptive statistics in the form of frequencies, mean, standard deviation. Statistical significance was considered at p-value <0.001.

### III. Results

**Table (1):** Distribution of Personal Characteristics of the teaching staff at Faculty of Nursing - Assiut University

Personal Characteristics Items	Teaching staff (n= 90)	
	No.	%
<b>Age:</b>		
< 30 years	34	37.8
30 - < 35 years	18	20.0
36 – 42 years	20	22.2
≥ 43 years	18	20.0
Mean ± SD	24. 2 ±16.1	
<b>Qualifications:</b>		
Clinical Demonstrator/Assistant Lecturer	44	48.9
Lecturer	28	31.1
Assistant professor	16	17.8
Professor	2	2.2
<b>Years of experience:</b>		
< 5	33	36.7
≥ 5	57	63.3
Mean ± SD	1.63± 0.48	
<b>Attending e-learning program</b>		
Yes	23	25.6
No	67	74.4

**Table (2):** Distribution of attitude towards e- learning items among the studied teaching staff (n=90)

Electronic learning Items	Strongly agree		Agree		Neutral		Disagree		Strongly Disagree	
	No	%	No	%	No	%	No	%	No	%
1. There are clear advantages for the use of e-learning.	42	<b>46.7</b>	38	42.2	10	11.1	0	0.0	0	0.0
2. E-learning helps in the educational achievement of students tasks.	28	31.1	48	<b>53.3</b>	8	8.9	6	6.7	0	0.0
3. Through e-learning, teacher can benefit students in a comprehensive way.	24	26.7	32	35.6	28	31.1	6	6.7	0	0.0
4.E-learning provides the best opportunities to raise the level of the students academically	20	22.2	48	<b>53.3</b>	18	20.0	4	4.4	0	0.0
5. The need to generalize e-learning at all educational levels.	28	31.1	40	44.4	14	15.6	8	8.9	0	0.0
6. E-learning helps to raise the efficiency of student achievement	24	26.7	38	<b>42.2</b>	24	26.7	4	4.4	0	0.0
7. You must use the e-learning in various scientific and literary materials	16	17.8	36	<b>40.0</b>	26	28.9	8	8.9	4	4.4
8. You think that the use of e-learning in the universities slows down the process of education to the curriculum	2	2.2	14	15.6	12	13.3	50	<b>55.6</b>	12	13.3
9. E-learning reduces the power of teacher in front of students.	6	6.7	8	8.9	10	11.1	46	<b>51.1</b>	20	22.2
10. E-learning increases the skills of students in learning.	22	24.4	44	<b>48.9</b>	22	24.4	2	2.2	0	0.00
11. E-learning depends on the individual learning, which does not need a teacher.	14	15.6	38	<b>42.2</b>	20	22.2	16	17.8	2	2.2
12. Students can accomplish their duties by the university e-learning more than the traditional way.	14	15.6	42	<b>46.7</b>	22	24.4	8	8.9	4	4.4
13. The use of e-learning reduces the economic cost of education.	14	15.6	48	<b>53.3</b>	18	20.0	8	8.9	2	2.2
14. Reduces the use of e-learning would direct experience during the educational process.	14	15.6	40	<b>44.4</b>	12	13.3	18	20.	6	6.7
15. The use of e-learning lead to the formation of the creative mind, instead of the traditional mind.	16	17.8	54	<b>60.0</b>	16	17.8	4	4.4	0	0.0
16. E-learning develops components of creative thinking among teachers and students.	20	22.2	44	<b>48.9</b>	20	22.2	6	6.7	0	0.0
17. The use of e-learning lead to improve the quality of learners.	26	28.9	48	<b>53.3</b>	12	13.3	4	4.4	0	0.0
18. The use of e-learning lead to improve the performance of the professional teachers.	20	22.2	46	<b>51.1</b>	12	13.3	12	13.3	0	0.0
19 -E-learning played a successful role in the curriculum change according to the needs of the future.	24	26.7	46	<b>51.1</b>	20	22.2	0	0.00	0	0.0
20. Through e-learning students can connect with each other to produce educational achievement.	16	17.8	48	<b>53.3</b>	20	22.2	6	6.7	0	0.0

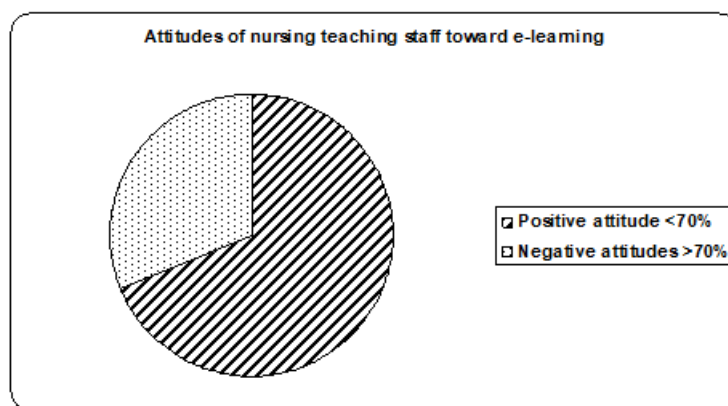


Figure (1): Attitudes of the studied teaching staff about E learning (n =90)

Table (3): Distribution of personal characteristics of the nursing students at Faculty of Nursing - Assiut University (total no. =650)

Personal Characteristics Items	Nursing Students (n= 650)	
	No.	%
<b>Age:</b>		
< 20 years	203	31.2
20 - < 25 years	447	68.8
Mean ± SD	20.22 ±1.12	
<b>Sex:</b>		
Male	97	14.9
Female	553	85.1
<b>Residence:</b>		
Urban	295	45.4
Rural	355	54.6
<b>Learning Courses by e-learning :</b>		
Yes	315	48.5
No	335	54.5
<b>Having personal computer:</b>		
Yes	301	46.3
No	349	53.7
<b>Attending e-learning symposium on technology:</b>		
Yes	96	14.8
No	554	85.2

Table (4): Mean scores of advantages and disadvantages domain of e-learning among the studied students. (n=650)

Items	Mean ± SD			
	1 <sup>st</sup> year (n= 150)	2 <sup>nd</sup> year (n= 200)	3 <sup>rd</sup> year (n= 200)	4 <sup>th</sup> year (n= 100)
1. E-learning can solve many of the educational problems.	3.83±1.33	3.95±0.89	<b>4.04±0.88</b>	3.57±0.95
2. E-learning gives the chance to reinforce student's information and to sharpen his/her skills in the field of specialization.	3.75±1.24	3.98±0.95	<b>4.02±0.86</b>	3.62±0.88
3. E- learning makes teaching and learning more flexible.	3.76±1.35	3.65±1.21	<b>3.98±1.05</b>	3.76±0.94
4. Adopting e-learning as a learning style shall help me strike a balance between study and family requirements.	3.54±1.40	3.51±1.10	<b>3.60±1.14</b>	3.32±1.02
5. My colleagues advise me to use the multiple benefits of e-learning.	3.17±1.47	3.07±1.14	<b>3.19±1.16</b>	3.12±1.02
6. E-learning made the learning process more enjoyable.	3.70±1.35	3.67±1.16	<b>3.92±0.99</b>	3.65±0.92
7. E-learning has contributed little to teacher-student interaction and communication.	3.39±1.31	3.54±1.22	<b>3.60±1.12</b>	3.22±0.97
8. E-learning has limited effectiveness in improving teaching and learning.	3.09±1.37	3.48±1.08	<b>3.34±1.07</b>	3.20±0.86
9. E-learning saves time for both teachers and students.	3.74±1.27	3.90±0.97	<b>3.78±1.04</b>	3.62±1.08
10. E-learning had little impact on my achievement.	3.45±1.33	3.54±1.05	<b>3.68±0.99</b>	3.19±1.02

**Table (5):** Mean scores of student's experience in using e-learning domain items among the studied students. (n=650).

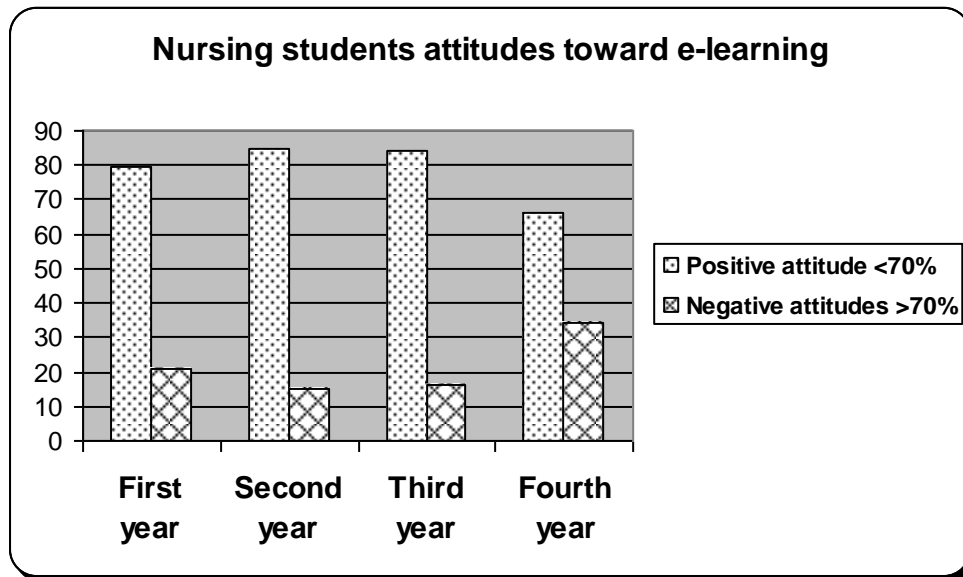
Items	Mean ± SD			
	1 <sup>st</sup> year (n= 150)	2 <sup>nd</sup> year (n= 200)	3 <sup>rd</sup> year (n= 200)	4 <sup>th</sup> year (n= 100)
1. Online learning increases my ability to understand subject matter.	3.44±1.41	3.41±1.26	<b>3.73±1.04</b>	3.36±0.99
2. E-learning will improve my achievement in the online courses.	3.46±1.23	3.47±1.23	<b>3.66±1.01</b>	3.33±0.94
3. E-learning allows me to deliver the course requirements in time.	3.44±1.27	<b>3.56±1.05</b>	<b>3.64±1.07</b>	3.42±0.93
4. I find it difficult to use e-learning to express my ideas in writing.	3.24±1.42	<b>3.39±1.15</b>	<b>3.40±1.15</b>	3.34±1.00
5. E-learning encourages me to conduct research in my field.	3.32±1.41	<b>3.54±1.16</b>	<b>3.57±1.06</b>	3.19±0.96
6. I find it difficult to get significant information through e-learning.	<b>3.11±1.29</b>	2.95±1.23	3.07±1.24	2.86±1.03
7. I feel depressed when I think of learning the subject matter online.	<b>3.17±1.36</b>	2.79±1.21	3.08±1.24	2.76±0.98
8. I hardly prefer e-learning as it leads to social isolation.	<b>3.31±1.33</b>	3.01±1.29	3.18±1.28	3.00±1.00
9. I find using e-learning both easy and possible.	<b>3.63±1.32</b>	3.56±1.17	3.53±1.12	3.24±0.94
10. E-learning helps me compensate for missed classroom lectures.	3.71±1.39	<b>3.87±1.02</b>	<b>3.84±1.07</b>	3.45±1.02
11. I prefer face-to-face learning to learning using internet.	3.58±1.34	<b>3.99±1.16</b>	<b>3.85±1.14</b>	3.69 ±1.07
12. I advise my friends to use the internet for reading lecture notes online.	3.42±1.28	<b>3.93±1.08</b>	<b>3.87±1.07</b>	3.36±1.06
13. I avoid using electronic sources for learning and research because I fail to use them efficiently.	<b>3.31±1.27</b>	3.09±1.11	3.29±1.12	3.15±0.97
14. I feel nervous and tense when fail to use e-learning effectively.	3.27±1.33	<b>3.58±1.12</b>	3.69±1.06	3.45±0.97
15. E-learning at campus consumes much of my time and effort.	3.16±1.26	3.23±1.16	<b>3.64±1.21</b>	3.25±1.05
16. I hardly prefer e-learning over traditional learning because it lacks the direct interaction with the teacher.	3.18±1.32	<b>3.53±1.11</b>	<b>3.49±1.20</b>	3.33±1.02
17. E-learning helps me acquire effective communication skills with other people.	3.25±1.30	<b>3.59±1.01</b>	<b>3.66±1.09</b>	3.34±0.91
18. I feel comfortable performing the e-learning activities and tasks related to the e-course.	3.35±1.28	<b>3.61±1.07</b>	<b>3.80±0.99</b>	3.34±0.92
19. I have a strong desire to register in e-learning courses.	3.28±1.42	<b>3.46±1.14</b>	4.35±2.98	<b>3.41±1.01</b>
20. I find it difficult to learn the course using the internet.	3.07±1.29	3.29±1.15	3.33±1.16	3.42±1.09
21. I prefer reading from a printed source rather than from websites or e-books.	3.42±1.31	<b>3.58±1.09</b>	<b>3.57±1.15</b>	3.45±1.13
22. I wish I could choose more online courses on campus to study.	3.41±1.44	<b>3.61±1.09</b>	<b>3.79±1.03</b>	3.52±1.06

**Table (6):** Mean scores of technical and pedagogical support at campus domain items among the studied students.

Item	Mean ± SD			
	1 <sup>st</sup> year (n= 150)	2 <sup>nd</sup> year (n= 200)	3 <sup>rd</sup> year (n= 200)	4 <sup>th</sup> year (n= 100)
1. The slowness of network is an obstacle to my learning online.	3.23±1.37	3.86±1.10	<b>3.94±1.20</b>	<b>4.06±1.08</b>
2. My university has got the technological base that is necessary to deliver e-learning.	3.06±1.29	3.18±1.16	<b>3.42±1.15</b>	<b>3.34±1.05</b>
3. My university systematically updates the e-learning websites.	3.19±1.28	<b>3.52±1.08</b>	<b>3.36±1.15</b>	3.24±0.99
4. In My university, faculty members prefer traditional ways of teaching and research.	3.32±1.35	3.56±0.98	<b>3.62±1.16</b>	3.26±0.99
5. Faculty members at my university are very motivated to use e-learning on a wide scale.	3.31±1.33	3.50±1.07	<b>3.57±1.12</b>	3.51±0.92
6. The faculty members at my university are inclined to use the internet for research more than for teaching purposes.	3.40±1.25	3.54±1.07	<b>3.90±0.97</b>	3.58±0.94
7. I think that in the visible future my university should be completely electronic facility.	3.53±1.21	3.58±1.09	<b>3.86±1.01</b>	3.43±1.06
8. I think that the adoption of e-learning as a learning style at the university will help solve the students' problems effectively.	3.51±1.20	3.52±1.17	<b>3.68±1.13</b>	3.47±0.91
9. My university's library really lacks electronic periodicals necessary to conduct research and to perform activities.	3.52±1.33	3.52±1.07	<b>3.77±1.06</b>	<b>3.56±0.93</b>
10. In my university, faculty members encourage me to use e-learning in doing educational research and activities.	<b>3.70±1.26</b>	3.63±1.07	3.69±1.18	<b>3.71±0.90</b>
11. I assume that the slowness of network decreases the level of effectiveness of e-learning on campus.	3.66±1.23	3.91±1.00	<b>4.24±0.89</b>	<b>3.97±1.06</b>
12. The e-learning system in my university lacks the technical support necessary for the management of e-courses.	3.48±1.35	<b>3.92±1.00</b>	<b>4.22±0.81</b>	3.68±1.05

**Table (7):** Mean scores of e-learning domains among the studied students (total number=650)

Domains	Mean ± SD				P. value
	1 <sup>st</sup> year (n= 150)	2 <sup>nd</sup> year (n= 200)	3 <sup>rd</sup> year (n= 200)	4 <sup>th</sup> year (n= 100)	
Advantages and disadvantages of e-learning use	35.44 ± 9.46	36.30±6.90	<b>37.17± 6.78</b>	34.27±6.01	0.000**
Student's experience in using e-learning	73.56± 14.30	<b>79.09±9.07</b>	79.07± 11.93	73.14± 10.65	0.000**
Technical and pedagogical support at campus	40.93 ± 8.31	43.25±6.73	<b>45.30± 6.07</b>	42.81± 5.99	0.000**



**Figure (2):** Nursing students' attitudes toward e-learning at Assiut University

**Table (1):** Showed that 37.8% of the studied teaching staff age was less than 30 years and 48.9% were clinical instructor's/Assistant Lecturer. Nearly two thirds had ≥ 5 years of experience and almost three-quarters of them (74.4%) didn't attend e-learning program.

**Table (2):** illustrated that 46.7% of the teaching staff strongly agree that there are clear advantages through the use of e-learning, nearly one third (28.9%) strongly agree that the use e-learning leads to improve the quality of learners. While, more than one quarter strongly agree that the use of e-learning helps to raise the student achievement, and e-learning played a successful role in the curriculum change according to the future need. Also, most of the teaching staff agreed in almost all items related to the advantages of e learning with statistical significant differences at P=0.001.

**Figure (1):** clarified that slightly more than two-thirds (68.8 %) of the teaching staff had positive attitude towards using e-learning, while, 31.2% had negative attitude towards e-learning.

**Table (3):** Illustrated that more than two thirds of studied nursing students aged from 20-< 25 years (68.8%),the majority of them (85.1%) were females, from rural area (54.6%) and had no learning by e-learning (54.5%), not have a personal computer (53.7%), had not attending e-learning symposium on technology (85.2%).

**Table (4):** presented that the highest mean scores (3.83±1.33 & 3.76±1.35 respectively) among the first year were in the item of "e-learning can solve many of the educational problems" and "online learning makes teaching and learning more flexible". However, the highest mean scores among the second and third year, were in "e-learning can solve many of the educational problems" and "e-learning gives the chance to reinforce student's information and to sharpen his /her skills in the field of specialization" (3.95±0.89 & 3.98±0.95; 4.04±0.88; 4.02±0.86 respectively). And among the fourth year, where "online learning makes teaching and learning more flexible" and "think that e-learning made the learning process more enjoyable" (3.76±0.94 & 3.65±0.92 respectively).

**Table (5):** Illustrated the mean scores of reported student's experience in using e-learning domain items. The highest mean scores among first year students were "using e-learning both easy and possible" and "e-learning helps me compensate for missed classroom lectures ( $3.63\pm 1.32$  &  $3.71\pm 1.39$  respectively)". However, among second year they were in "prefer face to face learning to learning using internet" and "advice their friends to use the internet for reading lecture notes online ( $3.93\pm 1.08$  &  $3.87\pm 1.07$ )". As regards the third year, the highest mean scores were "advice my friend to use the internet for reading lecture notes online" and "have a strong desire to register in e-learning courses ( $3.87\pm 1.07$  &  $4.35\pm 2.98$ ". Also, among the fourth year the highest mean scores were "e-learning helps me compensate for missed classroom lectures" and "prefers face to face learning to learning using internet ( $3.45\pm 1.02$  &  $3.69\pm 1.07$  respectively).

**Table (6):** Showed the mean scores of technical and pedagogical support at campus. The highest mean scores among the first year were "in my university, faculty members encourage me to use e-learning in doing educational research". Regarding to third year, the highest means were "assumes that the slowness of network decreases the effective of e-learning on campus ( $4.24\pm 0.89$ )" and, that faculty members prefer traditional ways of teaching and research ( $3.62\pm 1.16$ )" and "e-learning system in my university lacks the technical support necessary for the management of e-learning courses ( $4.22\pm 0.81$ ). While, among the fourth year the "slowness of network is an obstacle to my learning online" and "assumes that the slowness of network decreases the level of effectiveness of e-learning on campus ( $4.06\pm 1.08$  &  $3.97\pm 1.06$  respectively).

**Table (7):** Displayed a statistical significance differences between the mean scores of e-learning domains among the studied students in the four years. The highest mean scores as regard advantages and disadvantages of e-learning use are among third year students. Regarding students experience in using e-learning the highest mean scores were among second year students ( $79.09\pm 9.07$ ). In addition, as regards to technical and pedagogical support at campus the highest mean scores were among third year students ( $45.30\pm 6.07$ ) followed by second year students.

**Figure (2):** Showed that among first, second, third, and fourth years students had a positive attitudes toward e-learning (79.3 %; 85%; 84%; and 66%) respectively. While, the lowest percentages had a negative attitudes toward e-learning (20.7%; 15%; 16%; and 34%) respectively.

#### IV. Discussion

E-learning has been suggested as an alternative approach that can provide graduates with a wide range of academic and employability skills (Wang, 2007 & Alhabahba, et.al, 2012). Despite the growing recognition by HEFCE of the important role that technology can play in teaching and learning, universities have been slow to bring e-learning into the mainstream and maximize the potential benefits in the classroom. A survey of 19 Higher Education institutions by the Organization for Economic Co-operation and Development confirmed that student up-take of e-learning is increasing but certain barriers prevent it making an impact in the classroom. These include lack of infrastructure and funding, and staff skepticism of the pedagogic value of e-learning (OECD 2005). O'Neill et al (2004) supported the notion that universities are not fully utilizing technological advances, questioning whether they will continue to meet the needs of shifting knowledge-based societies and increasingly diverse student populations.

The results of the current study revealed that there is a positive attitude of most of the academic staff toward applying e-learning systems in nursing education. However, around one third had negative attitude (figure 1). This finding could be because almost three quarters of the academic staff didn't attend any e learning courses or trained to use it for the purpose of research than theoretical teaching (table 1). Furthermore, the findings of this study are in same line with a review of literature by Newton (2003) who reported that in over 20 (mainly US) surveys investigating staff attitudes to e-learning and VLEs, several themes emerged from the survey and included lack of incentives and rewards for staff involved in e-learning, and lack of strategic planning and vision. Also, the barriers most commonly identified by staff included lack of technical support and adequate equipment, and the increased amounts of preparation time required. Similar themes have been identified by subsequent research by Pajo and Wallace (2001). These findings answered the first question and clarified that teaching staff have positive attitude towards the use of e learning.

Regarding the students attitude, the findings of the current study showed that the students have a positive attitude towards using e learning (figure 2). This finding could be because e-learning is an extremely adaptable technology that can be used to cover different delivery modes-self-paced, interactive or live learning can match the varied training needs. Also, e learning makes new knowledge and skills available immediately and reduces the learning time required to master even the most complicated topics.

In the present study, it was observed that although students prefer face to face learning to learning by internet, they wish to have more online courses on campus (table 5). This means that students were aware of the



role of the teacher which can't be denied in the learning process in addition to the presence of many alternatives facilities of learning. Also, this may explain the belief of students that online learning offers flexibility in terms of time and location. The same findings were reported on a study done by **Suri & Sharma, (2013)**, where, the students reported that physical presence of teacher is extremely essential for teaching/learning process and online medium help them retain more. The finding of this study was also in agreement with **Eraqi et al, 2011** who showed that blended learning is the most preferred type of e-learning among the respondents at Helwan University since students reported that fully online and face-to-face teaching supported with technological media followed blended learning. Also, full online learning came as a first priority among the types of e-learning preferred by Menofia respondents followed by blended learning and face-to-face teaching supported with technological media, and there was positive attitude of students across the two faculties toward applying e-learning systems in their education. This finding support the idea that the modern technologies particularly the Internet, made education no longer limited to the four walls of the classroom. However, students assume that the slowness of network decreases the effective of e-learning on campus and, that faculty members prefer traditional ways of teaching and research and "e-learning system in the university lacks the technical support necessary for the management of e-learning courses. In addition, the fourth year students agreed that the slowness of network is an obstacle to the learning online" and the slowness of network decreases the level of effectiveness of e-learning on campus (table 6). These issues are still apparent in more recent studies. Likewise, **Scott (2004)** revealed that university students were enthusiastic towards the use of a VLE and used it regularly, and the most notable negative issue was the lack of enthusiasm from academic staff. In addition, **Gupta et al (2004)** reported that staff were concerned that the e-learning course available to students did not provide good standards of teaching by not delivering the same curriculum as traditional face-to-face teaching, and placing lecture notes online would reduce lecture attendance.

Regarding the total mean scores of the three domains of the reported students' attitude toward e-learning, the present study showed that the highest mean scores was "student's experience in using e-learning domain" that was mostly reported by second, then third, respectively. However, the reported advantages and disadvantages of e-learning use domain were reported by third, then second year students respectively. In addition, technical and pedagogical support at campus domain was reported by third, then second, year respectively. All of the e-learning domains among the studied nursing students had statistically significant differences (table 7). This finding is because of the activation of the e learning curriculum for the second year (Medical and Surgical nursing curriculum) & third year Obstetric and Gynecological nursing curriculum. Then the Nursing administration and Geriatric courses at fourth year in Faculty of Nursing, Assiut University, This finding could be because the teaching staff masters using e-learning in teaching from the previous two years.

## **V. Conclusions**

- There was positive attitude among teaching staff towards the use of e learning, with some concerns.
- Also, there was positive attitude among students towards the use of e learning.
- The highest mean scores as regard to student's experience in using e-learning domain were among second and third year respectively. While, as regard to the advantages and disadvantages of e-learning use domain were among third and second year students respectively. In addition, as regard to technical and pedagogical support at campus domain were among third and second year respectively. All of the e-learning domains among studied nursing students had a statistically significant differences at  $P=0.001$ .

## **Recommendations**

### **For Faculty:**

- There should be training programs on E- learning that focus on developing a positive attitude among teachers towards e. learning, & information and communication technology.
- All teaching staff should be encouraged to adopt e. learning strategies in their teaching courses.
- Maximizing the use of e. learning strategy in other non-nursing subjects for the faculty' students.
- Future research using qualitative techniques to identify problems which appear in the use of ICT for e-learning.

### **For university:**

- Monitoring and evaluation of e-Learning is a key component in ensuring sustainability of any e-Learning project and the effective use of technologies in line with educational goals.
- Strengthen the condition of network on the campus and technical support is necessary for the management of e-courses.
- Technical staff should be encouraged to undertake further training on new technologies under the sponsorship of the university.

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