Faculty Members' Willingness For using E-Learning in Colleges of Nursing: Comparative study, Dammam University in Saudi Arabia and Tanta University in Egypt.

Hoda A. Elebiary

The Department of Community Health Nursing, Faculty of Nursing, Tanta University
dr.elebiary@gmail.com

Abstract: E-Learning is the future of learning that focuses on both the individual needs of learners as well as the delivered content. Faculty members should make the best use of the latest available technology and to stay informed about the latest developments, and transfer what they have learned to new generations of students. **Aim of this study was:**To explore the willingness of faculty members in college of nursing toward E-Learning program as an alternative method for teaching.To measure faculty members attitudes, levels of skills toward integrating e-learning in their teaching. ***Design****:* Cross sectional descriptive study design was used in this study. ***Setting****:* The study was conducted in Colleges of nursing; Dammam University, Saudi Arabia and Tanta University, Egypt. ***Subjects****:* A convenient sample consisted of 193 nursing faculty members who were working at the Nursing Colleges at the time of study (88 from Dammam University and 105 from Tanta University). **Tools:** A structured questionnaire was developed by the researcher in four parts: **Part one** included socio-demographic data regarding participant. **Part two** included information about participants experience in teaching using different technologies. **Part three** included the participant's attitudes on usefulness of technology. **Part four** included the participant's supporting the e-learning program or not.

[Hoda A. Elebiary. **Faculty Members' Willingness For using E-Learning in Colleges of Nursing: Comparative study, Dammam University in Saudi Arabia and Tanta University in Egypt. .** *J Am Sci* 2012;8(12):149-155]. (ISSN: 1545-1003). http://www.jofamericanscience.org. 23

Key words: E-learning, educational technology, nursing education, faculty members, willingness, attitudes.

1. Introduction

E-Learning is the future of learning that focuses on both the individual needs of learners as well as the delivered content. Faculty members should make the best use of the latest available technology and to stay informed about the latest developments, and transfer what they have learned to new generations of students. Teacher's first-hand experience has a positive effect on his or her use of e-learning environments. Therefore, teachers should be encouraged to try e-learning strategies in their own courses [1]. E-learning provides new levels of flexibility in learning and teaching. This contribution of e-learning is dependent on the levels of willingness in several critical factors particularly in an educational organization [2]. The most well-known definition that educators agree on is that e-learning is set of synchronous and asynchronous instruction delivered to learners over technology [3]. E-learning as a part of today's technology has proven that it is appropriate for most students' mentalities and is a mind tool which promotes learning models such as Constructivism, collaborative learning, and critical thinking [4].

E-learning will provide faculty members extra teaching tools such as multimedia, chat rooms, and the flexibility of delivering materials from anywhere and anytime. E-learning will help educators to engage students in a communication process that will give remarkable feedback related to the course materials whether or not the materials need improvements [3]. Implementing e-learning by educational institutions has strong benefits, first of which is that e-learning provides consistent content that assists students to overcome problems involved with instructors' different teaching styles. The second benefit of an e-learning course is that self paced learning allows students to skip material they already know and move into the next topic [5]. The third benefit of e-learning course is that the course materials are uploaded to the server, which allows instructors and the technical support team to easily update and manage the materials [6]. A fourth benefit is offering students the freedom of learning anytime and anywhere [7].

Using new technology in teaching will make students more capable of working on their own to collect information from variety of sources besides the instructor, and in this way, e-learning will create a competitive learning environment [8].

E-learning has become all about delivering new learning materials in an electronic format. What has been probably more difficult to achieve is the effective design of instruction in order to provide a common sense of the online content. Therefore, the online course principles are based on previous experiences with online course materials from variety of schools. The multimedia principle indicates that students engage more with materials if they include text and graphics [3] such as drawings, charts, maps, etc.

Multimedia presentation assists students in making connections between graphics and text to simplify the understanding and memorization processes [9].

Faculty attitude could be one of the sources of the academic program change effort, on contrary, faculty development studies show that faculty members are inclined to accept only those changes they deem necessary or desirable [9]. E-learning is a new teaching technology, and no matter how sophisticated or competent this technology is, its effective implementation relies on users having a positive attitude toward it. Once faculty attitudes about e-learning become more positive, there is greater incentive to use it [10].

Faculty members may be reluctant to apply new teaching styles because of the extensive effort involved with the adaptation of the new teaching style. Therefore, there is a demand to change the negative attitude toward e-learning implementation among faculty members to fulfill e-learning teaching requirements [11]. The threat of the new teaching style involved with technology is not to deny or neglect the dangers of a situation; not to run away from it by destroying it and depriving oneself of its advantages; but to realize the dangers and meet them with conscious action based upon personal decision. This neutralizes the danger and lets us enjoy the advantages of technology without letting it deprive us of our humanity [12].

The faculty member willingness has become a critical issue for e-learning; instructors are concerned about several factors that can have a big impact on e-learning. It indicated that the necessity of implementing e-learning is due to the general shift toward philosophical theories, **Magnussen (2008)** [12] in which an educator is viewed, not as a distributor of content, but as a facilitator of learning [10]. Another concern is that many educators rely on current textbook resources to provide authoritative guidance about the material to be included in a course. However, textbooks typically cover an overwhelming amount of information that can be stressful to learners. Therefore, it is important that educators design e-learning based courses which could focus on major concepts and their relationship to the course materials instead of asking learners to memorize isolated facts from textbooks [13].

Skills are usually acquired or learned, as opposed to abilities, which are often thought of as innate [14]. Teachers may need to acquire knowledge and skills in handling information and communication techniques for e-learning courses. Several studies demonstrate that technical obstacles are easier to overcome than lack of communication skills. In addition, instructors may need to have some form of training in communication skills' because it has a strong effect on e-learning courses [4,15,17].

Faculty members are mainly concerned about the increased workload they may encounter in e-learning. Eighty percent of faculty surveyed indicated that they would have to spend more time teaching an e-learning class [16]. Another barrier is that faculty will have to spend too much time on the computer to manage the learning process; they have to design an applicable e-learning course that is appealing to what learners want to learn. Prabhu 2008, mentioned that online students report deeper learning approaches, more challenging coursework than their peers in face-to-face classes. Faculty members may have to provide individualized support and feedback to each learner and make sure that learners are on the right track [17]. Besides the lengthy amount of time that faculty members spend to design the e-learning course and monitoring learners' performances, they have to provide a clear schedule of their availability indicating times when learners can receive a prompt response [18].

Significance of the study

Unfortunately, most faculty members at the College of Nursing are not incorporating e-learning into their courses. Furthermore, no study has been conducted to explore faculty willingness toward and skills with e-learning or perceived barriers that might be faced at the colleges of nursing during the implementation of e-learning. Therefore, the following study will tackle major issues facing faculty members in e-learning implementation at the colleges of nursing.

Thus the aim of this study was to examine faculty members' willingness for e-learning at the colleges of nursing, Dammam University in Saudi Arabia and Tanta University in Egypt.

2. Material and Methods

Research Design

Cross sectional descriptive design was used in this study.

Setting:

This study was conducted at Colleges of Nursing, Dammam University in Saudi Arabia and Tanta University in Egypt.

Subjects:

A convenient sample consisted of 193 nursing faculty members who were working at the Nursing colleges at the time of study (88 from Dammam University and 105 from Tanta University).

Tools:

A structured questionnaire was developed by the researcher in four parts:

Part one included socio-demographic data regarding participants.

Part two included information about participants' experiences in teaching using different technologies.
Part three included the participant's attitudes on usefulness of technology.
Part four included the participant's supporting the e-learning program or not.

The Likert Scale questionnaire listed the second and third parts, and each person was requested to rank each question as 1) strongly agree; 2) agree; 3) not sure; 4) disagree; and 5) strongly disagree. A panel of experts in online course delivery reviewed the content validity of the survey instrument used in this study. The panel included 3 faculty members from e-learning center in Tanta University. In addition, two experts' panel faculty members from e-learning center at Dammam University reviewed the questionnaire. They were selected based on their experience in online teaching to be able to validate the questionnaire for construction, clarity, design, and length, as well as to determine its consistency with the purpose of the study. Minor changes were suggested by the experts. Reliability is an instrument's ability to consistently measure whatever it is designed to measure [19]. The higher the coefficient, the greater the reliability of the instrument. Reliability coefficients generally should be at least .70, and in some contexts may need to be even higher to be considered acceptable. Table 1 presents the calculated internal consistency coefficients of the measuring items of the questionnaire.

Statistical analyses

After data were collected, they were coded and transferred into especially design formats to be suitable computer feeding. Statistical analyses were performed using the Statistical Package for Social Sciences software (version 19.0). Results were presented as means ± SD. T-test, and correlation were used to test the significance of some related variables in this study. P-value of (0.05 & 0.01) levels was used as the cut off value for statistical significance.

Internal Consistency of the Measuring Items of the Survey Instrument

Items Scale	Coefficient	
	Tanta University (n=105)	**Dammam University (n=88)**
Faculty Experiences with Using the technologies	R = 0.78	R = 0.80
Faculty opinions about e-learning programs	R = 0.89	R = 0.92
Faculty ability to using e-learning programs	R = 0.91	R = 0.92

3. Results

Table 1 shows the distribution of the participated faculty members by age, it represent the median age as 39 %, 45.5% that reflect age group between 36 and 45 years, in Tanta and Dammam Unversity respectively. Males represent only 21.0 & 9.5 % of the total participating faculty members in tanta and dammam unversity respectively, while females represented the majority of participating faculty members. As regarding to teaching Experience, distribution of the participating faculty members according to the years of teaching experience was found to be as follows: 32.4 % & 31.8 % reported to have more than 10 years of teaching experience in tanta and dammam unversity respectively. It can be also seen that faculty rank represented as, professors 9.5 % & 6.8 % of the faculty members, assistant professors 11.4 % & 20.5% , Lecturers 36.2 % & 29.5% of the faculty members, and the remaining were either assistant lecturers, instructors, and supervisors in tanta and dammam unversity respectively.

Figure 1 shows the distribution of faculty members according to their using the computer in Tanta and Dammam Unversity. It represented that 49.6 % & 75% of the faculty members using computer many times or at least once a day in Tanta and Dammam Unversities respectively.

Figure 2 shows the distribution of faculty members according to their using networking facilities such as worled wid web, internet, intranet, emails, compact disk etc. It reported that 27.7 % & 24 % of the faculty members using networking facilities many times or at least once a day in Tanta and Dammam Unversity respectively.

Table – 2 illustrated that the most of the participants from Tanta and Dammam Unversities demonstrated positive attitudes toward the use of computers for improvement of the quality of education, because they tend to either agree or strongly agree with the importance of all advantages of computers. T-test used for statistical differences of participants attitudes from tanta and dammam universities. There were statistical signficant diference of computer advantages between Tanta and Dammam as partcipants indicating that they 1- Computers are needed both in education and at work (p=0.012), Knowing how to use computers is a worthwhile skill (p=0.005) Access to computers will improve general satisfaction (p=0.034), Using computers will help improving the education (p=.009), and Teacher training should include using computers (p=0.007).

Table 3 shows the most faculty members in Tanta & Dammam Universities tended to either agree or strongly agree in regards to the following aspects of E-Learning by indicating that e-learning: 1- will be flexible than formal classroom attendance for many female who have family responsibilities and/or other commitments (82.8 & 74.8% with p= 0.026), 2- will be helpful to students in remote areas to continue their higher education (83.1 & 81.7% with p=0.004), and 3- will help students to acquire their educational need for career preparation and advancement (79.5 & 79.8 % with p=0.037).

Table 4 shows that the most faculty members in Tanta & Dammam Universities demonstrated positive attitudes toward the development of new teaching and communication techniques by indicating that they are willing to develop their knowledge and skills in computer in order to be able to participate in e-learning (60.5 & 77.5% with p=0.019), to learn e-mail and computer conferencing to participate in e-learning (68.6 & 78.8% with p= 0.006), and to use the appropriate features of the World Wide Web and Internet in their teaching (70.7% & 70.4% with p=0.025) (61.9 & 70.4% with p=0.038) respectively. Thus, faculty member were positive in their attitudes toward development of new teching methods.

Table 5 presnted that faculty members uses of computers, e-mail, or communication networks did not significantly influence their opinions concerning whether or not to support the development and implementation of e-learning program with (p=0.712, 0.435, & 0.960 for Tanta University) and (p=0.614, 0.398, & 0.584 for Dammam Universirty) respectively. Table shows also that 75 (71.4%) faculty members from Tanta University and 60 (68.2%) from Dammam University were suported e-learning program respectively.

Table 1- Distribution of the partcipants demographic data

Demographic data	Tanta University (n=105)		Dammam University (n=88)	
	No.	%	No.	%
Age group:				
25-35	30	28.6	25	28.4
* 36-45	41	39.0	40	45.5
46-55	18	17.1	15	17.0
> 55	16	15.2	8	9.1
Gender:				
Male	22	21.0	10	11.4
Femal	83	79.0	78	88.6
Years of teaching Experience				
1-3 yr.	18	17.1	22	25.0
4-6 yr.	23	21.9	20	22.7
7-10 yr.	30	28.6	18	20.5
> 10 yr.	34	32.4	28	31.8
Faculty Rank:				
Professor	10	9.5	6	6.8
Prof.	12	11.4	18	20.5
Lecturer	38	36.2	26	29.5
Lecturer	24	22.9	18	20.5
Instructor	12	11.4	15	17.0
Techncian	9	8.6	5	5.7

* Median

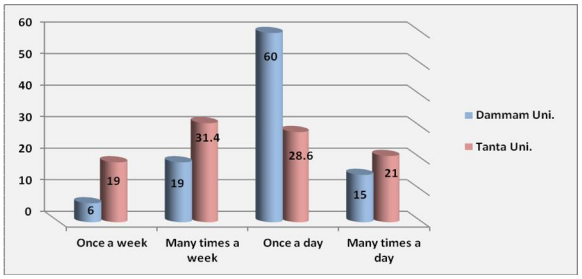

Fig1 – Distribution of Faculty Members According to their Using the Computer

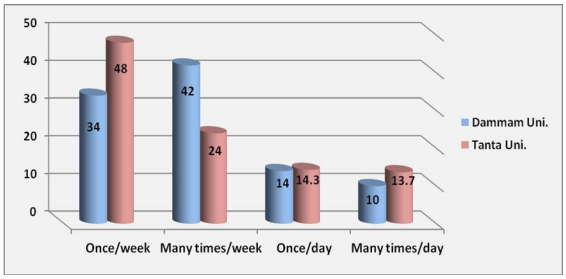

Fig. 2 – Distribution of Faculty Members According to their Using Networking Facilities

Table 2 –Attitudes of Faculty Members Toward the Importance of Using Computers Enhancement of the Classroom Teaching and Student Learning Productivity

Attitudes of the Faculty Members	Tanta Uni.		Dammam Uni.		Sig.
	SA	A	SA	A	
Computer would increase learning productivity	49.5	28.5	52.5	31.8	0.098
Computers are needed both in education and at work	51	37.4	41.3	47.4	0.012*
Computer can be useful in almost all subject matters	42.5	26.8	45.4	40.4	0.340
Computers help improving the overall quality of life	29.8	37.6	38.5	41.1	0.125
Knowing how to use computers is a worthwhile skill	39.7	52.4	51.9	41.9	0.005*
Access to computers will improve general satisfaction	46.3	34.8	50.7	36.1	0.034*
Using computers will help improving the education	46.8	44.8	45.7	47.5	0.009*
Planning to use a computer in teaching in the future	41.3	37.4	46.6	25.7	0.426
Using computer will help saving time and effort	45.4	30.4	51.4	30.4	0.325
Computers help in courses which demand creativity	38.5	41.1	38.7	43.9	0.851
Teacher training should include using computers	40.9	41.9	41.2	47.3	0.007*
It is important to learn how to use a computer	50.7	26.1	37.8	49.6	0.075
The more you practice computers, the better you learn	44.7	36.8	51.5	30.4	0.105

SA=Strongly Agree; **A**=Agree

Table 3–Attitudes of Faculty Members Toward The General Concept of E-Learning

Attitudes of the Faculty Members	Tanta Uni.		Dammam Uni.		Sig.
	SA	A	SA	A	
E-Learning is an appropriate solution to the problem of overcrowded university classes	41.3	28.5	42.5	25.1	0.084
E-Learning will be flexible for many female who have family responsibilities and/or other commitments	45.4	37.4	41.3	33.5	0.026*
E-Learning will be more flexible than formal education for many working women	38.5	36.8	45.4	18.5	0.124
E-Learning will enable students to overcome the transportation problem of attending formal classes	40.9	37.6	38.5	37.9	0.245
E-Learning will be helpful to students in remote areas to continue their higher education	50.7	32.4	40.9	40.8	0.004*
E-Learning will help students to acquire their educational need for career preparation and advancement	44.7	34.8	50.7	19.1	0.037*

SA=Strongly Agree **A**=Agree; * Signficant at level ($p<0.05$)

Table 4 –Attitudes of Faculty Members Toward The Development of NewTeaching and Communication Techniques for Impementation of E-Learning Program

New Teaching and Communication Techniques	Tanta Uni.		Dammam Uni.		Sig.
	SA	A	SA	A	
Faculty members could teach more students by using new teaching and communication techniques	32.7	27.9	42.5	27.3	0.091
Faculty members are receptive to new teaching techniques to participate in e-learning program	32.5	31.4	41.3	31.6	0.068
Faculty members are receptive to develop computer skills in order to participate in e-learning program	38	22.5	45.4	32.1	0.019*
Faculty members are receptive to e-mail and computer conferencing to participate in e-learning program	33.5	35.1	38.5	40.3	0.006*
Faculty members are willing to collaborate with other specialists to design and develop e-learning course	43.1	20.7	40.9	34.8	0.163
Faculty members are willing to use the appropriate features of the World Wide Web in their teaching	47.2	23.5	50.7	19.7	0.025*
Faculty members are willing to use the appropriate features of the internet in their teaching	32.5	29.4	45.7	36.1	0.038*

SA=Strongly Agree A=Agree; * Signficant at level ($p<0.05$)

Table 5 –Faculty Members uses of Computers, E-mail, & Networks in relation to Their Support for E-Learning Program

Tanta University						
Facilities Tool	Support (75)		Not Support (30)		Test Result	
	Mean	S.D.	Mean	S.D.	t-value	p-value
Computers	2.58	1.34	2.83	1.19	- 0.256	0.712
E-Mail	1.87	1.22	2.15	1.23	- 0.790	0.435
Networks	1.83	1.07	1.44	0.94	+ 0.359	0.690
Dammam University						
Facilities Tool	Support (60)		Not Support (28)		Test Result	
	Mean	S.D.	Mean	S.D.	t-value	p-value
Computers	3.11	1.76	3.43	1.33	- 0.237	0.614
E-Mail	2.23	1.54	2.44	1.56	- 0.524	0.398
Networks	1.89	1.23	1.65	1.32	+ 0.248	0.584

4. Discussion

Past research has indicated a high degree of access of innovative technology within higher education, as well as a high degree of receptiveness to the adoption of e-learning technologies within higher institutions [20].

In the present study approximately halh of the faculty members from Tanta University and three quarters from Dammam Unversity using computer many times or at least once a day. As regarding faculty members using networking facilities such as worled wid web, Internet, Intranet, emails, compact disk etc. this study reported that approximately one quarter of the faculty members using networking facilities many times or at least once a day in Tanta and Dammam Unversities.

Multimedia integration into the online materials helps faculty members to realize that teaching requires different tools that can facilitate the teaching process. E-learning shows faculty members that communication and information technology is still being explored and developed. As **Abouchedid & Eid (2004)** mentioned, faculty members are in favor of e-learning because it will improve education and raise it to higher technological level of education [21]. The result of present study found Computers skills are needed both in education and at work to improve general satisfaction and education. In addition, faculty members in the study declared that E-Learning will be flexible for many female who have family responsibilities and/or other commitments and for remote area' students. Moreover, they stated that E-Learning will help students to acquire their educational needs for career preparation and advancement. On the other hand, some research **(Collis & Peters, 2000; Surry, 2000)** has found that faculty utilization of innovative technology in teaching was not at a satisfactory level [22, 23].

Kayte et al. (2004) found that the e-learning can help deliver supporting innovations in teaching and learning and developing the work force [24]. **Sun et al.,(2007)** opines that the instructor's attitude towards e-learning is one of the critical factors affecting learners' perceived satisfaction [25]. **Liew et al. (2007)** found in his study that the instructors have a very positive perception towards using e-learning as a teaching assisted tool [9]. In the present study, faculty members were receptive to develop computer skills in order to participate in e-learning program. They were also willing to use the appropriate features of the World Wide Web and Internet in their teaching.

Summary

The findings of this study indicated that, although many of the participants had moderate knowledge of using computers, they still were enthusiastic about the idea of facilitating e-learning program as alternative method to the traditional classroom instruction. The findings also revealed that most of the faculty members demonstrated strongly positive attitudes toward the use of computer, communication networking facilities, and willing to the adoption of e-learning program that would be more suitable to the educational needs of student. The findings also indicated that certain personal and professional characteristics of the faculty members such as gender, age, and years of experiences are correlated with their willingness toward the implementation of e-learning program as an alternative to traditional classroom method of teaching. Based on the results of present study, it is clear that faculty members in college of nursing Tanta and Dammam universities have positive attitudes towards using E-learning Program.

Recommendations

Teacher's first-hand experience has a positive effect on his or her use of e-learning environments. Therefore, teachers should be encouraged to try e-learning strategies in their own courses. For example, they could be assisted in preparing e-content for their courses.

Teachers need the support from the institution in order to make use of new technologies in the teaching learning process.

Attitude plays a vital role in using technology as a strong tool for a positive change. There must be programs at higher educational institutions which could focus on developing a positive attitude among teachers towards e-learning and information and communication technology

The findings of this study are significant to nursing education because they point to E-learning that can be used to promote a positive teaching/learning environment for all faculty members as well as nursing students who cannot attend regular programs.

The results of this study should help nursing institutions in Egypt and Saudi Arabia to consider the development and implementation of e-learning program as an alternative to traditional classroom method of teaching.

Corresponding author:
Hoda A. Elebiary
The Department of Community Health Nursing,
Faculty of Nursing, Tanta University

References

1. Krishnakumar, R., Rajesh K M. (2011) Attitude of Teachers' of Higher Education towards e-Learning. Journal of Education and Practice. 2(4), www.iiste.org
2. Eslaminejad T, Masood M, Ngah NA (2010) Assessment of instructors' readiness for implementing e-learning in continuing medical education in Iran. Med Teach. 32(10).
3. Colvin, R., Mayer, R. (2008). *E-learning and the science of instruction*. California: John Wiley.
4. Gunga, S. & Richetts, I. (2007). Facing challenges of e-learning initiatives in African university. *British Journal of Educational Technology, 38*(5), 896-906. Retrieved Jan 20, 2012, from
5. http://libproxy.library.unt.edu:2776/cgi-in/fulltext/117984214/HTMLSTART
6. Lewis, C. (2007). *Benefits of e-learning*. Retrieved Jan 20, 2012, from
7. http://www.worldwidelearn.com/elearning-essentials/elearning-benefits.htm
8. Gulf Institute of Science and Technology (2009). Vision. Retrieved March 12, 2012, from
9. http://www.gust.edu.kw/elearning/aboutus.html
10. Georgina, D., & Hosford, C. (2009). Higher education faculty perceptions on technology integration and training. Teaching and Teacher Education: An International Journal of Research and Studies, 25(5), 690-696.
11. Gotthardt, M., Siegert, M. J., Schlieck, A., Schneider, S., Kohnert, A., Gross, M. W., Schafer, C., Wagner, R., Hormann, S., Behr, T., Cabillic, R., Klose, K., Jungclas, H., and Glowalla, U. (2006). How to successfully implement e-learning for both students and teachers. *Academic Radiology, 13*(3), pp. 379-390.
12. Liaw, S., Huang, H., & Chen, G. (2007). Surveying Instructor and Learner Attitudes toward E-Learning. *Computers & Education, 49*(4), 1066-1080. (ERIC Document Reproduction Service No. EJ773936) Retrieved September 16, 2008, from ERIC database.
13. Ruiz, J. G., Mintzer, M. J., & Leipzig, R. M. (2006). The impact of e-learning in medical education. *Academic Medicine, 81*, 207-212.
14. Carter, D. (2008). Study: online enrollment jumps 13 percent. Retrieved Feb 19, 2012, from http://www.eschoolnews.com/news/top-news/index.cfm?i=56046
15. Magnussen, L. (2008). Applying the principles of significant learning in the e-learning environment. *Journal of Nursing Education, 47*(2), 82-6.
16. Sadik, A. (2007, July 1). The readiness of faculty members to develop and implement e-learning: The case of an Egyptian university. International Journal on E-Learning, 6(3), 433-453.
17. Christianson, L., Tiene, D., & Luft, P. (2002). Web-based teaching in undergraduate nursing programs. Nurse Educator, 27, 276-282.
18. Prabhu, M. (2008). Report challenges online-learning assumptions. Retrieved feb 19, 2012, from http://www.eschoolnews.com/news/top-news/index.cfm?i=56098
19. Allwords (2008). *Definition of skill*. Retrieved feb 22, 2012, from http://www.allwords.com/word-skill.html
20. Levinsen, K. (2007). Qualifying online teachers-communicative skills and their impact on e-learning quality. Education and Information Technologies, 12(1), 41-51.
21. Conrad, A., & Munro, D. (2008). Relationships between computer self-efficacy, technology, attitudes and anxiety: Development of the computer technology use scale (CTUS). *Journal of Educational Computing Research, 39*(1), 51-73.
22. Caruso, J. C. (2000). Reliability generalization of the NEO personality scales. *Educational and Psychological Measurement*, *60*, 236-254.
23. Souleles, N. (2005, October). Retrieved from http://www.elearningartdesign.org/researc.htm
24. Abouchedid, K., & Eid, G. (2004). E-learning challenges in the Arab world: Revelations from a case study profile. *Quality Assurance in Education: An International Perspective, 12*(1), 15-27. (ERIC Document Reproduction Service No. EJ801873) Retrieved September 14, 2012, from ERIC database.
25. Collis, B., & Peters, O. (2000). Influences on the educational use of the WWW, email and videoconferencing. *Innovations in Education and Training International, 37*(2), 108-119.
26. Surry, D. W. (2000). Strategies for motivating higher education faculty to use technology. *Innovations in Education and Training International, 37*(2), 145-153.
27. Kayte, O., Gurmak S., and John O. (2004), "Implementing eLearning Programs for Higher Education: A Review of the Literature", Journal of Information Technology Education, 3, 313-323.
28. Sun, P., Ray, J. T., Finger, G., Chen, Y., & Yeh, D. (2007), "What drives a successful e- learning? An empirical investigation of the critical factors influencing learner satisfaction", *Computers & Education*, **5**0(4), 1183-1202.

10/22/2012