

EVALUATE THE EFFECTIVENESS OF E-LEARNING PROGRAM ON ACADEMIC ACHIEVEMENT IN NURSING THEORY COURSE AMONG B.SC.NURSING STUDENTS

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ABSTRACT

Nowadays many universities offering study programmes through a variety of e-learning methods. E-learning has grown tremendously in nursing & health sector and also has been integrated into education and training. So I selected this experimental study to evaluate the effectiveness of E-Learning program on academic achievement in nursing theory course among B.Sc. Nursing students at Applied Medical Science College , Alnamas, This innovative title provides fresh insight into e-Learning and e-Teaching practices while exploring the varying roles of academic staff in adoption and application. The objectives are to assess and compare the pre and post academic achievement of theory course within experimental group at Applied Medical Science College , Alnamas., to assess and compare the pre and post academic achievement of theory course within control group at Applied Medical Science College , Alnamas., to assess and compare the effectiveness of E-Learning program on academic achievement of theory course among B.Sc. Nursing students between in experimental and control group and to associate the post academic achievement of theory course with selected demographic variables in experimental group. . True experimental research design was used. The sample of the study was B.Sc. Nursing student who have registered in primary health care –theory course and who fulfilled the inclusive criteria of the sample selection. The study sample consists of 30 B.Sc. Nursing students in that 15 samples were in experimental group and 15 samples were in control group. Probability simple random sampling technique was used to select the samples for experimental and control group. The study reveals that E-Learning program is effective in getting academic achievements of theory course among B.Sc. Nursing students at Applied Medical Science College, Alnamas. Based on the study, nursing students can utilize E-Learning program to gain knowledge in their subject matters.

Keywords: Effectiveness, E-Learning, academic achievement, B.Sc. Nursing Students.

INTRODUCTION:

Computer-enhanced learning has increased in demand due to developments in technological aids such as multimedia presentation and the internet. In this age of technology, it is imperative for teachers to consider the importance of technological integration in the classroom. Online learning is one of the fastest growing trends in educational uses of technology.

In the corporate world, according to a report by the American Society for Training and Development, about 33% of training was delivered electronically in 2007, nearly triple the rate in 2000 (Paradise,2008). Sherman H, et.al (2012) had conducted a comparative study between blended versus lecture method on Critical care pharmacology education for the nurses orienting to specialized areas. The findings determined no significant differences in cognitive learning outcomes or learner satisfaction between blended versus lecture format. Magda Abdelazis et.al (2011). The study recommended that it is better to use and tune a “blended learning environment” that integrates the strengths of both e-learning and lecture into nursing education to provide the most efficient and effective instruction and overcome the deficiency of limited skills and resources.

Today many universities across the world are offering study programmes through a variety of e-learning methods. E-learning has grown tremendously in nursing & health sector and also has been integrated into education and training. Applied E-Learning and E-Teaching in Higher Education presents international practices in the development and use of applied e-Learning and e-Teaching in the classroom in order to enhance student experience, add value to teaching practices, and illuminate best practices in the area of e-Assessment. So I selected this experimental study to evaluate the effectiveness of E-Learning program on academic achievement in nursing theory course among B.Sc. Nursing students at Applied Medical Science College , Alnamas,

OBJECTIVES:

- To assess and compare the pre and post academic achievement of theory course within experimental group at Applied Medical Science College , Alnamas.
- To assess and compare the pre and post academic achievement of theory course within control group at Applied Medical Science College , Alnamas.
- To assess and compare the effectiveness of E-Learning program on academic achievement of theory course among B.Sc. Nursing students between in experimental and control group.
- To associate the post academic achievement of theory course with selected demographic variables in experimental group.

METHODOLOGY:

Evaluative research approach was adopted in this study. True experimental research design was used. The sample of the study was B.Sc. Nursing student who have registered in primary health care –theory course and who fulfilled the inclusive criteria of the sample selection. The study sample consists of 30 B.Sc. Nursing students in that 15 samples were in experimental group and 15 samples were in control group. Probability simple random sampling technique was used to select the samples for experimental and control group. Before experiment, a pre-test was conducted by administering the standardized achievement test in primary health care-theory course prepared by the investigator. The treatment variables were instruction given using lecture method in control group and instruction given using e-learning method in experimental group. After the experiment, a post-test was conducted by administering the same test used for pre-test. The scores were analyzed statistically.

RESULT:

The pre and post score of academic achievement of theory course within experimental group

Sl.No	Academic Achievement Level	Experimental Group			
		Pre Test		Post Test	
		n	%	n	%
1.	Excellent(91-100 Marks)	0	0	2	13
2.	Very Good (81-90 Marks)	0	0	6	40
3.	Good (71-80 Marks)	9	60	4	27
4.	Satisfactory (61-70 Marks)	6	40	3	20
5.	Unsatisfactory (Below 60 Marks)	0	0	0	0

The pre and post score of academic achievement of theory course within control group

Sl.No	Academic Achievement Level	Control Group			
		Pre Test		Post Test	
		n	%	n	%
1.	Excellent(91-100 Marks)	0	0	1	6
2.	Very Good (81-90 Marks)	0	0	4	27
3.	Good (71-80 Marks)	8	53	7	47
4.	Satisfactory (61-70 Marks)	7	47	3	20
5.	Unsatisfactory (Below 60 Marks)	0	0	0	0

Comparison and effectiveness of E-Learning program on academic achievement of theory course among B.Sc. Nursing students between in experimental and control group

Sl.No	Group	Before Intervention		After Intervention		Effectiveness (Difference)		Effectiveness 't' Test
		Mean	Standard Deviation (SD)	Mean	Standard Deviation (SD)	Mean	Standard Deviation (SD)	
1.	Experimental group	70.4	5.5	80.6	9.2	10.2	3.7	3.6
2.	Control group	70.1	5.1	75.4	8.5	5.3	3.4	2.0

The data analysis revealed that in experimental group the overall mean difference was 10.2 with SD 3.7 and 't' test value was 3.6 at the level of $p < 0.001$. Similarly in control group the overall mean difference was 5.3 with the SD 3.4 and 't' test value was 2.0. It showed that statistically significant difference in between experimental and control group. Hence the E-Learning program was found to be effective in getting an excellent academic achievement in primary health care-theory course among B.Sc. Nursing students. The Chi Square test shows that there was no statistically significant association between post academic achievements of theory course with selected demographic variables in experimental group.

CONCLUSION:

The study reveals that E-Learning program is effective in getting academic achievements of theory course among B.Sc. Nursing students at Applied Medical Science College, Alnamas. Based on the study, nursing students can utilize E-Learning program to gain knowledge in their subject matters.

REFERENCE:

1. B.T. Basavanthappa, "Nursing Education" Jaypee publication Ltd, Newdelhi,1st edition,2003.
2. K.P. Neeraja, Text book of Nursing education, Jaypee publication Ltd, 7th edition, 2009.
3. Jose Luis Fernandez Aleman, "Effects of competitive computer-assisted learning versus conventional teaching methods on the acquisition and retention of knowledge in medical surgical nursing students", Volume 31, Issue 8, November 2011, Pages 866–871.
4. Rachelle, "Computer-assisted versus traditional classroom instruction to promote change in the nursing management of the second stage of labor", ProQuest, Educational Technology, 2009.
5. Sherman H, Comer L, Putnam L, Freeman H, "Blended versus lecture learning: outcomes for staff development", Journal of Nurses Staff Development. 2012, July;28(4):186-90.
6. Lahti M, Hätönen H, Välimäki M. Impact of e-learning on nurses' and student nurses knowledge, skills, and satisfaction: a systematic review and meta-analysis. *Int J Nurs Stud* 2014;51(1):136–49. [PubMed] [Google Scholar]
7. Al-Hameed F, Al-Dorzi HM, Aboelnazer E. The effect of a continuing medical education program on Venous thromboembolism prophylaxis utilization and mortality in a tertiary-care hospital. *Thromb J* 2014;12:9. [PMC free article] [PubMed] [Google Scholar]
8. Baghaie R, Rasouli D, Rahmani A, Mohammadpour Y, Jafarizade H. Effect of web-based education on cardiac dysrhythmia learning in nursing student of Urmia University of Medical Sciences. *Iranian Journal of Medical Education* 2012;12(4):240–8. [Google Scholar]
9. Zarif Sanaiey N, Karamizadeh Z, Faghihi AA, Mohammadi H. The comparison study of Knowledge and skill of physicians before and after contribution in traditional and electronic continuous Medical Education Diabetic course. *Interdisciplinary Journal of Virtual Learning in Medical Sciences* 2020;3(1):21–30. [Google Scholar]
10. Van de Steeg L, IJkema R, Langelaan M, Wagner C. Can an e-learning course improve nursing care for older people at risk of delirium: a stepped wedge cluster randomised trial. *BMC Geriatr* 2014;14:69. [PMC free article] [PubMed] [Google Scholar]
11. Chong MC, Sellick K, Francis K, Abdullah KL. What influences malaysian nurses to participate in continuing professional education activities? *Asian Nurs Res (Korean Soc Nurs Sci)* 2011;5(1):38–47. [PubMed] [Google Scholar]
12. Hugenholtz NI, de Croon EM, Smits PB, van Dijk FJ, Nieuwenhuijsen K. Effectiveness of e-learning in continuing medical education for occupational physicians. *Occup Med (Lond)* 2008;58(5):370–2. [PMC free article] [PubMed] [Google Scholar]
13. Liu WI, Rong JR, Liu CY. Using evidence-integrated e-learning to enhance case management continuing education for psychiatric nurses: a randomised controlled trial with follow-up. *Nurse Educ Today* 2014;34(11):1361–7. [PubMed] [Google Scholar]
14. Curran VR, Fleet LJ, Kirby F. A comparative evaluation of the effect of Internet-based CME delivery format on satisfaction, knowledge and confidence. *BMC Med Educ* 2010;10:10. [PMC free article] [PubMed] [Google Scholar]
15. Kattoua T, Al-Lozi M, Alrowwad AA. A review of literature on E-learning systems in higher education. *International Journal of Business Management & Economic Research* 2016;7(5):754–62. [Google Scholar]