

Attitude of Teachers' of Higher Education towards e-Learning

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Abstract

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. E-learning makes new knowledge and skills available immediately and reduces the learning time required to master even the most complicated topics. E-learning is the changing trend of education. The modern technologies particularly the Internet, made education no longer limited to the four walls of the classroom. Measuring attitude and efforts to improve attitude towards technology is very much essential to effect any change through technology. This study focuses on the attitude of teachers of higher education towards e learning. The findings of this study reveal that the teachers have a favourable attitude towards e learning as well teachers who are familiar about computer and information and communication technology differ in their attitude towards elearning when compared to the teachers who are not familiar with technology. Attitude plays a vital role in using technology as a strong tool for a positive change. There must be programmes at higher educational institutions which could focus on developing a positive attitude among teachers towards e-learning and information and communication technology

Key words: Attitude, e-learning, blog and ICT

1. Introduction

Educators must go beyond computer literacy to achieve technological competence is successful integration of technology into the classroom is to occur. Deborah L. Lowther., "et al." (1998) emphasizes that the technological competence also requires a transition from using the computer as an instructional delivery system to one of using the computer as a learning tool. Shu-Sheng Liaw., "et al." (2007) found that the trend of using e-learning as a learning and/or teaching tool is now rapidly expanding into education. E-learning is the new wave in learning strategy. 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. As per Mahdizadeh. H., "et al." (2007) E-learning environments increasingly serve as important infrastructural features of universities that enable teachers to provide students with different representations of knowledge and to enhance interaction between teachers and students, amongst student themselves.

2. Need For the Study

Education in the digital world of today can actually make that meaningful shift by ensuring that if students do not learn the way they are taught, they can be taught the way they learn. This pedagogical shift, when integrated into educational software and appropriate technology, can make learning exciting and enjoyable while securing successful learning outcomes in shorter time frames. While colleges and universities globally lend to use asynchronous or delayed technologies with an instructor as the basis of e-learning and thereby include tools like online discussion forums, electronic books, online exams and grading, online mentoring, web-linked etc. As the 11th plan approach paper states: The 11th plan provides an opportunity to restructure policies to achieve a new vision of

growth that will be much more broad based and inclusive, bringing about a faster reduction in poverty and helping bridge the divides that are currently the focus of so much attention. While it recognizes that Information and Communication Technology (ICT) has a great potential for enhancing learning levels and improving quality of education.

Modern day learning environments are characterized by their place and time independence, their integrated presentation and communication facilities, and their opportunities for re-use of learning technologies in the form of learning objects. Many researchers claim that technology push will enhance the quality of education; In fact, Clark (1994) argues that the question of whether media or technology will ever influence learning remains open to debate. A well-defendable viewpoint lies not in the media or technology used, because only positive attitudes toward that media or technology can improve the quality of learning or teaching. Thus, understanding users' attitudes toward learning technology, including instructors' and learners' attitudes, enables us to make learning more effective, efficient, and appealing. Gefen & Straub (1997) asserts that among the various theoretical models developed to examine users' intentions of using computer and communication technology, perceived usefulness is a key to influence behavioral intentions. Technology offers tremendous opportunities for increasing the effectiveness and efficiency of education in the future. Students, faculty, staff and administrators now use technology extensively in their daily activities and have become reasonably technologically literate. The trend of using e-learning as a learning and teaching tool is now rapidly expanding into education. Many educators and researchers had high hopes for e-learning, believing that it would provide more access to information and communication, and would ultimately lead to a new revolution in education. Several studies have been conducted to examine attitudes towards e-learning in the West and other parts of the world. But in the Indian context research in this direction were very few. According to Murahari, B (2008) E-learning in India, is still at an experimental stage. Woodwoth (1938) opines that attitudes, the affective by-product of an individual's experience, have their bases in his inner urges, acquired habits, and the environmental influences by which he is surrounded. In other words, attitude result from personal desires and group stimulation. They act as causes as well as results of behaviour. They are personal and are associated with the feeling tones connected with the individual's experiences. Attitudes grow and develop, as do other mental and emotional behaviour patterns, in terms of an individual's reactions to his environment. Attitude is a set or disposition (readiness, inclination, tendency) to act toward an object according to its characteristics so far as we are acquainted with them. Measuring attitude and efforts to improve attitude towards technology is very much essential to effect any change through technology. This necessitated the researcher to study the Attitude of teachers' of Higher Education towards E-learning.

3. Definition of Terms

3.1 Electronic learning or e-learning

Electronic learning or e-learning is an all-encompassing term generally used to refer to computer enhanced learning, although it is often extended to include the use of mobile technologies such as PDAs and MP3 players. 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. In cases where mobile technologies are used, the term M-learning has become more common.

3.2 Higher Education

Education is a very important role in our lives. There is a rapidly growing demand for a higher education in the world today. Most people seek higher education to improve their job prospects and social status. Some other goes for it for self-improvement, development of character and for the sake of knowledge. Higher education imparts education and knowledge in one specific field such as sciences, social science, medicine, history and others. Higher education helps people to see world in a rational ways for the benefit of all. Educated people get wider vision to perceive the facts of the life. 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.

4. Objectives of the Study

1. To find out the attitude of teachers working in colleges of engineering and technology and university departments towards elearning.
2. To find out whether the teachers differ in their attitude towards e learning on the basis of certain background variables.
3. To find out whether the teachers differ in their attitude towards e learning on the basis of ICT familiarity.

5. Hypotheses of the Study

1. The attitude of teachers working in colleges of engineering and technology and university departments towards e learning is low.
2. The teachers do not differ in their attitude towards e learning on the basis of certain background variables.
3. The teachers do not differ in their attitude towards e learning on the basis of ICT familiarity.

6. Methodology

Survey method was adopted for this study.

6.1 Sample for the Study

The population of the study consisted of teachers of higher education in Tamil Nadu. Teachers of Higher Education here in this study refer to teachers serving in colleges of engineering and technology and university departments.

The sample was selected from the higher educational institutions where there is facility for e-learning. The teachers were selected on the basis of purposive sampling. 255 teachers were selected for the study.

6.2 Tools Used in the Study

Attitude of teachers of higher education towards e-learning tool was developed by the researcher. The tool consists of 16 statements. Out of the 16 statements 10 were positive statements and 6 were negative statements.

6.3 Statistical Techniques Used

Differential Analysis

Two way Analysis of variance

6.4 Administration of the Tool

In order to collect data for the present study the researcher administered the tools to the teachers working in colleges of engineering and technology and university departments.

7. Analysis and Discussion

The data have been analyzed by SPSS Package and interpretation of data is given below

7.1 Attitude towards E-Learning and Variables with Two Categories

The mean differences in the attitude towards e-learning caused by the variables, namely, teachers knowledge in computer and teachers who have blogs are 1.80 and 1.41 respectively and the corresponding t-values are 1.98 and 2.16. The mean differences in the attitude due to the variables computer knowledge and blogs are significant at 0.05 levels for the df 253 in each case. (Table 1)

In the above cases rejecting the null hypotheses it is concluded that at 95 percent confidence interval that the teacher who have knowledge in computer and without knowledge in computer, the mean difference is in favour of teachers who possess knowledge about computer. Teachers having blogs and teachers who do not have blogs

differ significantly in their attitude towards e-learning and their mean difference is in favour of teachers having blogs.

There exists no significant mean difference in the attitude towards e-learning with respect to the variables e-mail id, courses attended in computers and net access, the t-value of the corresponding mean differences are computed to be 0.53, 0.19 and 1.11 respectively and all are not significant at 0.05 level for the df 253. It is therefore concluded that there are no significant mean difference in attitude towards e-learning based on the variables e-mail id, courses attended in computer and net access facility.

7.2 ICT Familiarity and Variables With Two Categories

The mean difference in the ICT familiarity of the subjects caused by the variable namely, net access is 0.89 and the corresponding t-value is 3.56 which is significant at 0.01 level for its df 253. Similarly, the mean differences in the ICT familiarity of the subjects caused by the variables namely, teachers who have e-mail id, teachers who possess knowledge in computer and teachers who have blogs are 1.11, 0.77 and 0.60 whose t-values 2.23, 2.12 and 2.35 respectively, are found to be significant at 0.05 levels for the df 253. (Table-2).

Hence rejecting the null hypotheses, it is concluded that with 95 percent confidence interval that the teachers having net access at institution and both at institution and home differ significantly in their ICT familiarity. Teachers having e-mail id and teachers do not have e-mail id differ significantly in their ICT familiarity. Teachers differ in their ICT familiarity based on knowledge in computer and without knowledge in computer. Teachers significantly differ in their ICT familiarity between having their own blogs and do not have their own blogs.

There exists no significant mean differences in the ICT familiarity of the subjects due to courses attended in computers as the t-value of the corresponding mean difference is 0.01 which is found not to be significant at 0.05 level for the df 253.

7.3 Findings

The teachers, those who are possessing and not possessing the knowledge of computer causes change in the attitude towards e-learning as the mean difference is in favour of teachers who possess knowledge about computer.

Teachers, those who have blogs and teachers who have no blogs, significantly differ, in their attitude towards e-learning and their mean differences are in favour of teachers having blogs. There is no significant mean difference in the attitude towards e-learning based on the variables like, e-mail ID, courses attended in computer and net access facility.

It is concluded that teachers having net access at institution and both in the institution and at home differ significantly in their ICT familiarity. The mean difference is in favour of teachers those who have net access both in the institution and at home are having more ICT familiarity. Teachers having e-mail id and teachers do not have e-mail id differ significantly in their ICT familiarity. The mean differences are in favour of teachers those who are having e-mail id.

Teachers differ in their ICT familiarity with and without the knowledge of computer. The mean difference is in favour of teachers who have knowledge of computer. Teachers significantly differ in their ICT familiarity because of having and not having their own blogs. The mean difference is in favour of teachers those who have their own blogs. There is no significant mean difference in the ICT familiarity with reference to the variable namely, teachers who have attended courses on computer.

7.4 Conclusions

Teachers who possess knowledge about computer are having favourable attitude towards e-learning. Teachers having blogs differ significantly in their attitude towards e-learning from those who do not have blogs.

The following conclusions favour the above mentioned findings:

Kayte o'neill "et al." (2004) found that 'the implications of e-learning on lecturers and students are extensive); and the e-learning can help deliver supporting innovations in teaching and learning and developing the work force. Sarah Golden "et al." (2006) in her study observed that the lecturers were positive and proactive in their attitude towards the role of e-learning in supporting their teaching practice. Pei-Chen Sun A (2007) opines that the instructor's attitude towards e-learning is one of the critical factors affecting learners' perceived satisfaction. Shu-

Sheng 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.

The ICT familiarity is more in the case of teachers who have net access both at home and in the institution. The teachers those who have e-mail id are having better ICT familiarity. The ICT familiarity is better in the case of teachers those who have knowledge in computer. The ICT familiarity is better in the case of teachers those who have their own blogs.

8. Recommendations for Further Research

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. There must be scope for knowing and making use of modern technologies like interactive white boards, blogs, etc. Teachers need the support from the institution in order to make use of new technologies in the teaching learning process. It is necessary that, in the near future, e-learning environments are to be made popular among college and university teachers in the Indian context.

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

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Notes

Table 1 Attitude towards e-learning and variables

variables	Type	N	Mean	Std-Devi.	t - value	Sig level
e-mail id	Yes	239	65.08	5.11	0.53	N.S
	No	16	64.38	5.20		
Knowledge in Computer	Yes	221	67.33	4.80	1.98	0.05
	No	34	65.53	5.81		
Course attended in computer	Yes	134	64.98	5.09	0.19	N.S
	No	121	65.10	5.14		
Blogs	Yes	100	65.89	4.86	2.16	0.05
	No	155	64.48	5.19		
Net Access	Institute	199	64.66	5.14	1.11	N.S
	Both	136	65.37	5.06		

Where N.S – Not Significant

Table 2 ICT Familiarity and variables

variables	Type	N	Mean	Std-Devi.	t - value	Sig level
e-mail id	Yes	239	15.86	1.92	2.23	0.05
	No	16	14.75	1.98		
Knowledge in Computer	Yes	221	15.90	1.98	2.12	0.05
	No	34	15.12	2.06		
Course attended in computer	Yes	134	15.64	2.05	0.01	N.S
	No	121	15.64	1.92		
Blogs	Yes	100	16.06	1.93	2.35	0.05
	No	155	15.46	2.03		
Net Access	Institute	199	15.40	1.99	3.56	0.01
	Both	136	16.29	1.98		

Where N.S – Not Significant

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