Investigation of Teacher's Attitude towards e-learning-A case Study of Panjab University, Chandigarh, India

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Abstract

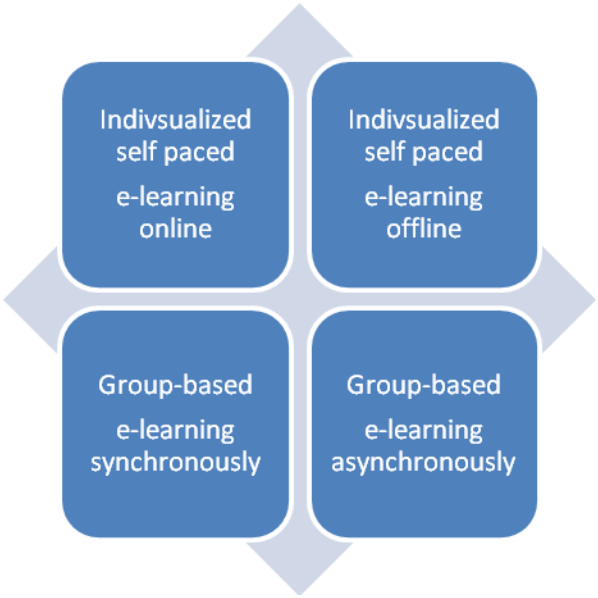
Important changes have been seen in the field of education due to the technological advancements. e-learning is an upcoming method that used technology to assist student learning. It is one of the tools that has emerged from information technology and has been integrated in many universities. A teacher is the most crucial part for delivery through e-learning. This paper analyses the attitude of teachers towards e-learning. In this study 85 teachers teaching in 6 major faculties in Panjab University Chandigarh, India were analyzed. The results show a favourable bent of teachers towards e-learning. The results of this study show that teachers of Panjab University are in favor of blending current teaching method with e-learning. The results further indicated no significant gender difference teacher's attitude towards computer and e-learning. The research study has explored the very initial perception and opinion of teachers at university towards blended learning or e-learning. Thus this research can further be taken up to study the attitude of teachers towards e-learning. The research outcomes can be used as an input for framing the e-learning platform or tool for implementing virtual learning environment in an educational setting through teachers.

Keywords: e-learning attitude, teachers, computer attitude

Introduction

We live in an era where text messages, photos, audio and video files are transmitted from one device to another in seconds, latest mobiles and i-phones allow us to connect to the internet through wireless network; e-mails, instant messaging, chat rooms, and blogs have revolutionized the way information is shared. As the letter "e" in e-learning stands for the word "electronic", e-learning would incorporate all educational activities that are carried out by individuals or groups working online or offline, and synchronously or asynchronously via networked or standalone computers and other electronic devices. There are various types or modalities of e-learning activity.

Figure 1: Modalities of e-learning



An e-Learning environment which works as an interface between the students and their learning objectives and provides different means to achieve the learning goal. Usually the e-Learning environment can be accessed using a Web browser over the Internet or Intranet and supports several learning strategies and different ways of interaction, communication and collaboration. Additionally e-Learning environments often include administration and management utilities and interfaces to other systems to support the organizational part of learning as well. Thus e-learning has become a very crucial part of this ever changing educational environment.

Review of Literature

Beamish defined e-learning as a wide set of application and processes allied to training and learning that include computer based learning, online learning, virtual classrooms and digital collaboration. These services can be delivered by a variety of electronic media, including the intranet, internet, interactive TV and satellite. Bassfar, Rozinah and Merza (2012) in their research revealed that there is no significant difference in the teacher candidates' attitudes and self-efficacy toward e-learning on the basis of gender and age group. Larbi-Apau & Moseley

(2012) in their study had also reported that affective attitude was the highest contributor of computer attitude followed by perceived usefulness, behavior, and perceived behavioral control attitudes. Teaching faculty had relatively high positive computer attitude; with purposeful practice and enabling environment and it was found that they can manage technology-oriented proficiencies and professional performances effectively. Bakr (2011) in the study on Egyptian public schools highlighted that teachers have positive attitude towards computers. No significant differences in terms of gender and teaching experience were reported. Murithi & Indoshi (2011) in their findings reported that both students and teachers had positive attitude towards the use of computer in relation to the Computer Studies curriculum. Kutluca (2010) in his research a significant difference on the basis of ; attending computer classes, having a computer, level of using a computer, frequency of using computer, experience of using computer and class of the scores of attitudes toward computers. It also highlighted that teachers mostly use computers at home or internet cafes. Salih, Mustafa & Mehmet (2009) in their study found out that teachers had positive attitudes towards computer and internet use. Panda & Mishra (2007) in their study concluded that the extensive use of computers and email has a high relationship with positive attitudes towards e-learning. Mahdizadeh, Biemans & Mulder (2008) in their research found that the teacher's attitude towards e-learning can be attributed by their opinions about web-based activities, computer-assisted learning and the perceived added value of e-learning environments. Sheng Liew et al., (2007) concluded that the instructors have an encouraging and positive perception towards using e-learning as a teaching assisted tool. Uschanov & Sutinen (2007) in their research reported differences between teachers in terms of their experience in online instruction and their education in online instruction. The results revealed that teachers' training in online instruction is correlated with their level of satisfaction towards the support by their university. Albirini (2006) in his study concluded that teachers have positive attitudes toward ICT in education. The teacher's attitudes can be predicted by computer attributes, cultural perceptions and computer competence. Tuparova et al., (2006) in their research had also concluded that academic lecturers have positive attitude towards making use of computers and Internet in their work. A significant difference existed in teacher's inclination to develop and apply electronic learning material on the basis of teaching experience.

OBJECTIVES AND SCOPE OF THE STUDY

Objectives of the study:

1. To analyze the perception of teachers toward e-learning.
2. To analyze to role of gender on perception of teachers toward e-learning.

Scope of Study: The study was carried out on university teaches at Panjab University Chandigarh.

RESEARCH AND METHODOLOGY

Participants: The study used a survey approach to examine the perception of teachers towards e-learning. The target population was the faculty of Panjab University, Chandigarh. A total of 100 questionnaires were distributed among various faculties of the university. It included Faculty of Commerce, Faculty of Fine Arts, Faculty of Engineering, Faculty of Science, and Faculty of Law.

Measurement: Demographic profile of the respondents such as name, sex, age, and faculty (Department) of student was covered in the first section. The next section examined the [perception of teachers towards e-learning.

DATA ANALYSIS

Overview of data gathered: A total of 100 questionnaires were distributed, on final scrutiny 15 were dropped because they were incomplete and the remaining 85 questionnaires were retained for the further analysis. Microsoft Excel and SPSS were used to analyze the questionnaire data and the subsequent data analysis was undertaken using statistical tools.

Data Analysis:

Section one discusses about demographic characteristics, i.e. gender, age, faculty of study. The sample size under study had students from all the major faculties of Panjab University.

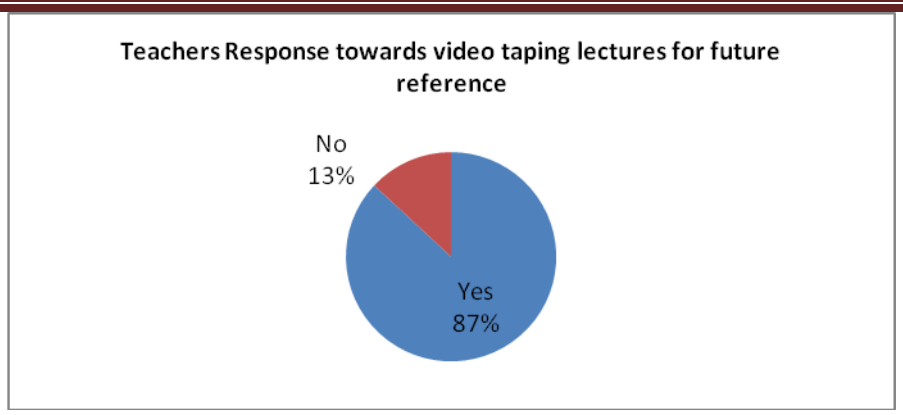
The sample size under study had teachers from all the major faculties of Panjab University. The distribution of males and females in the sample survey was 37.6 % males and 67.2 % female. Majority of the respondents of the survey were below the age of 40 years. 46.5 % were less than 30 years and 33.7 % were between 30-40 years **(Table-1).**

Table-1: Demographic Statistics

Descriptive Statistics	No of Respondents	Percentage
Faculty		
Arts	38	44.7
Business Management	11	12.9
Engineering Technology	12	17.6
Law	15	14.1
Science	07	8.2
Education	02	2.4
Gender *		
Male	32	37.6
Female	52	67.2
Age*		
Less than 30 years	40	46.5
30-40 years	29	33.7
40-50 years	9	10.5
Above 50 years	6	7.1

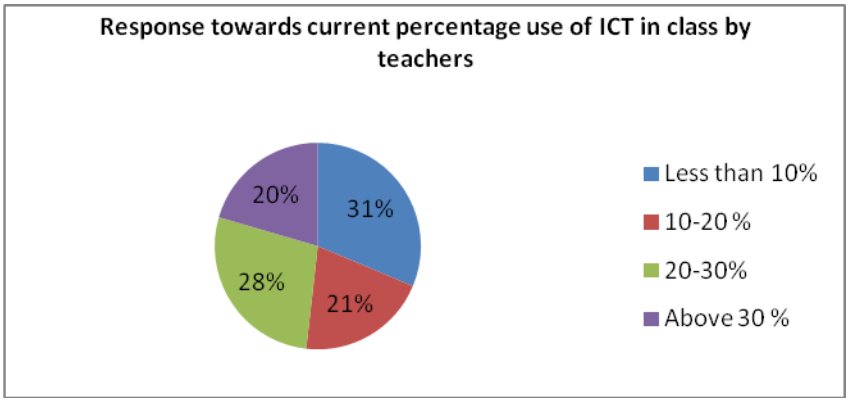
The next section analyzed the perception of teachers towards e-learning with the help of multiple choice questions. The first question enquired about the response of teachers towards using videotaping as a medium of Virtual learning and future reference.

Figure 2: Teachers Response towards videotaping lectures for future reference



This result indicated that majority of teachers i.e. around 87 % feel that video recording of lectures for future reference is a good idea and can be implemented for benefits of students as well as teachers. The next question focused on understanding the current usage of ICT tools by the teachers in the classroom.

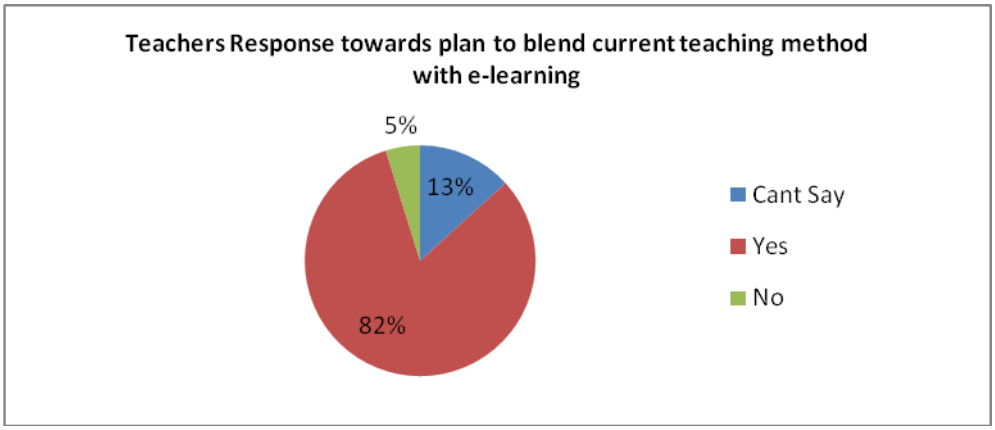
Figure 3: Response towards current percentage use of ICT in class by teachers



This result suggested that around 30 % teachers used ICT only around 10 % in class. This was followed by 21 % teachers using 10-20 % and 28 % using between 20-30 %. The rest 20 % were using it over 30 % in their classes currently.

The next question collected information that whether the teachers plans to blend the current teaching method with e-learning. The results suggested that 82 % teachers were in favor of blending current teaching method with e-learning. 13 % were still undecided and only a small number that is 5 % responded in negation.

Figure 3: Teachers Response towards plan to blend current teaching method with e-learning



In the next question the teachers were asked whether the present learning methodology should be replaced with e-learning. Figure 4 clearly indicates that more than 50 % teachers feel that e-learning cannot replace the present learning methodology. 27 %were not able to comment and only 22 % felt that e-learning can replace present learning methodology.

Figure 4: Teachers Response towards replacement of present learning methodology with e-learning

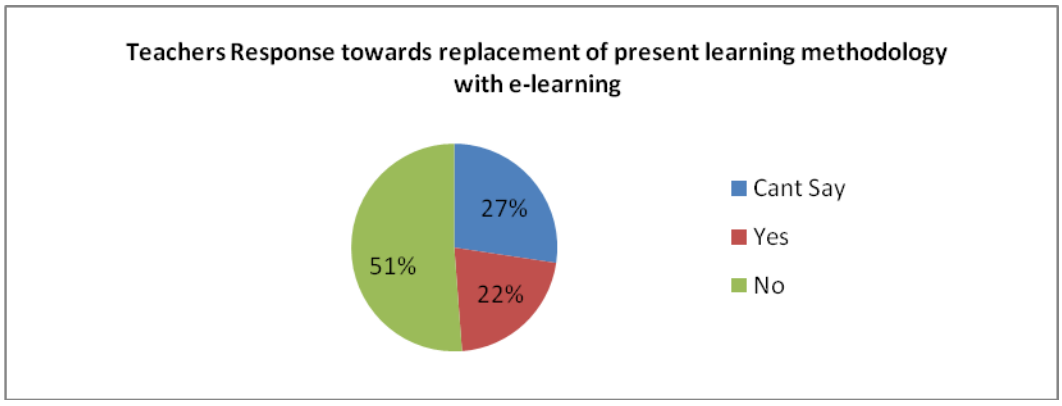


Table 2 presents an analysis of teacher's response towards various e-learning questions on the basis of gender.

Table 2: Analysis of teacher's response towards various e-learning questions on the basis of gender

Questions related to e-learning	Responses	Yes	No	Can't Say
	Gender			

plan to blend present teaching method with e-learning	Male	**25**	**02**	**05**
	Female	**43**	**02**	**05**
replacement of present learning methodology with e-learning	Male	**10**	**16**	**06**
	Female	**08**	**26**	**17**

The table indicates gender seems to play a less role in teacher's response towards questions on e-learning. To further test the same we used co-relation. The table shows no significant correlation thus gender is not correlated to teacher's response towards questions on e-learning.

Table3: Analysis of correlation between teacher's responses towards various e-learning questions on the basis of gender

		Plan to blend present teaching method with e-learning	Replacement of present learning methodology with e-learning	e-learning along with classroom learning is more successful
Gender	Pearson Correlation	-.010	.197	-.057
	Sig. (2-tailed)	.929	.072	.606
	N	83	84	84

CONCLUSION

The results of this study show that teachers of Panjab University are in favor of blending current teaching method with e-learning. The perception of teachers towards e-learning was explored in this study. The results indicated that majority of teachers felt that video recording of lectures for future reference should be done. Research also suggests that half of the teachers used ICT in class as 20 % of their lecture. 82 % teachers under study were in favor of blending current teaching method with e-learning and had downloaded material from internet for purpose of study

and research. More than 50 % teachers feel that e-learning cannot replace the present learning methodology. Teachers portrayed a mixed opinion towards e-learning. The results also tested the impact of gender on perception of teachers towards e-leaning. The results indicated no significant gender difference teacher's attitude towards computer and e-learning. The results fall in line with previous researches (Bakr 2011 , Bassfar et al 2012). Contrasting views have also been presented by Broos (2005) claiming female teachers have negative attitude towards e-learning. The research study has explored the very initial perception and opinion of teachers at university towards blended learning or e-learning. Thus this research can further be taken up to study the attitude of teachers towards e-learning.

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