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# A Study of Degree College Teachers Attitude Towards Using New Technologies in Teaching in Relation to Some Variables

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## ABSTRACT

Amalgamation of new technologies into education, teaching and learning has been an imperative concern in many countries. Technology and its various tools have become a part and parcel of our day to day life. The introduction of technology to the field of education has completely changed the conventional way of teaching, training and instruction by adapting and making the enormous use of technology in the field of education. Present research intends to study degree college teachers' attitude towards using new technologies in teaching in relation to some variables. Favourable attitude of degree college teachers towards using new technology in day to day teaching activities will certainly equip degree college teachers to use them in appropriate situations in teaching and thus measuring of degree college teachers' attitude towards using new technologies in teaching is very much needed. The study aimed at finding out whether there exit any difference in degree college teachers' attitude towards using new technologies in teaching on the basis of gender, designation and type of an institute. A causal Comparative method of descriptive research which comes under the quantitative paradigm has been used in the present research. The sample consisted of 90 degree college teachers from different colleges affiliated to Mumbai University. In order to collect data 'Attitude towards using new technologies in teaching' scale by Dr. Rajasekar S. (2007) was used. The results indicated that there is no significant difference in degree college teachers' attitude towards using new technologies in teaching on the basis of gender, designation and type of an institute.

**Keywords:** Attitude Towards using New Technologies in Teaching, Gender, Designation, Type of an Institute

*"If we teach today as we taught yesterday, we rob our children of tomorrow."*<sup>1</sup>

—John Dewey

## INTRODUCTION

In the past, teaching, learning and education simply meant face-to-face interaction, lectures by teacher, reading books or printed handouts, taking notes and completing homework and assignments etc. In short; education, learning and teaching were considered difficult rather impossible without a teacher, books and blackboards. Today, education, teaching and learning have taken on a whole new meaning. Nowadays Computers are an indispensable part of every classroom and teachers are using DVDs, CD-ROMs, videos, whiteboards and internet to show students how things work and operate in reality.

Amalgamation of new technologies into education, teaching and learning has been an imperative concern in many countries. Technology and its various tools have become a part and parcel of our day to day life. The introduction of technology to the field of education has completely changed the conventional way of teaching, training and instruction by adapting and making the enormous use of technology in the field of education. In order to make the best use of available resources, it is crucial that all persons engaged in the educational enterprise and especially the teacher should understand amply the dynamics and mechanism of educational technology and offer the finest possible education to the students. Also the favourable attitude of degree college teachers towards using new technologies in day to day teaching activities will certainly equip degree college teachers to use them in appropriate situations in teaching and thus measuring of degree college teachers' attitude towards using new technologies in teaching is very much needed.



Disputes of teachers' change in attitudes towards technology are crucial to any discussion of technology integration. In general, when degree college teachers are asked to use technology to facilitate learning, some amount of change is required along any or all of the following dimensions: (a) principles, attitudes, or pedagogical ideologies; (b) content knowledge; (c) pedagogical knowledge of instructional practices, (d) altered instructional technology and its resources. Although degree college teachers might consider that new technology and its tools will help them to accomplish professional and personal chores more competently, they are still cautious and doubtful to incorporate the same tools into the classroom for a wide range of reasons including the lack of relevant knowledge, low computer self-efficacy, higher computer anxiety and present belief systems. Present research intends to study degree college teachers' attitude towards using new technologies in teaching in relation to some variables.

## REVIEW OF RELATED LITERATURE

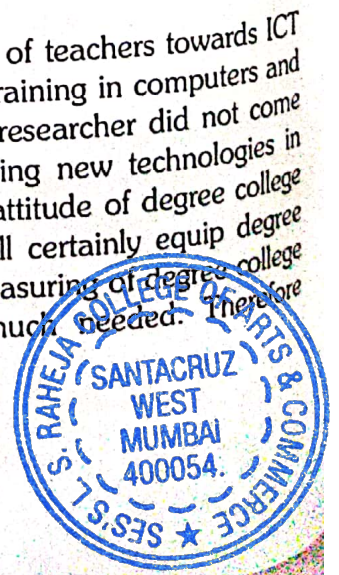
Kumar, K., Patil, S.S. (2013)<sup>2</sup> studied teachers attitude towards new technology. In order to collect data, an instrument (Attitude Towards Using New Technology Scale) developed by Dr. Rajasekar was used. The sample of the study consisted of 60 secondary school teachers (30 Government and 30 Private) of Karnataka State. It was concluded that (1) there is a significant difference between male and female teacher's attitude towards using new technology at secondary school level. Female teachers have more positive attitude towards using new technology as compared to male teachers. (2) There is a significant difference between private and government secondary school teacher's attitude towards using new technology. Private secondary school teachers show more positive attitude towards using new technology as compared to Government secondary school teachers.

Kulkarni, M.V. (2012)<sup>3</sup> studied the secondary school teachers' attitude towards using new technology in education and explored the relationship between teachers' attitudes and factors which are related to teachers' personal characteristics. In order to collect data, an instrument (Attitude Towards Using New Technology Scale) developed by Dr. Rajasekar was used and 45 secondary schools were taken. 300 teachers were taken as respondents. The results indicated that secondary school teachers have positive attitude towards using new technology. Also revealed no significant differences between attitudes towards using new technology of secondary schools teachers in term of gender. But it differs regarding age.

Agbatogun, A.O. (2010)<sup>4</sup> did a study in which it was found that the teachers attitude concerning the use of ICT was predicted to a significant level by variables such as gender, self-concept and anxiety when dealing with computers.

Al-Zaidiyeen, N.J., Mei, L.L., Fook, F.S. (2010)<sup>5</sup> found that in a sample of 460 teachers teaching in Jordan, while the teachers had a positive outlook when it came to using ICT, these teachers had very few opportunities to actually views ICT for educational purposes. The same study also found the existence of a significant and positive relationship between how much a teacher used ICT and their attitude towards an ICT. Combined together, these findings suggested that there is a need to increase the consideration which is given to ICT use for educational purposes.

Literature review revealed that many studies have been done on attitude of teachers towards ICT and its use in teaching in relation to the teacher's age, gender, qualification, training in computers and also their socio-economic status. During the process of literature review the researcher did not come across any study pertaining to degree college teachers' attitude towards using new technologies in teaching in relation to gender, designation and type of institute. Favourable attitude of degree college teachers towards using new technology in day to day teaching activities will certainly equip degree college teachers to use them in appropriate situations in teaching and thus measuring of degree college teachers' attitude towards using new technologies in teaching is very much needed. Therefore researcher was motivated to conduct the present study.



## STATEMENT OF THE PROBLEM

The problem selected by the researcher is a study of degree college teachers' attitude towards using new technologies in teaching in relation to some variables.

## OPERATIONAL DEFINITIONS

- **Attitude Towards Using New Technologies in Teaching:** A complex mental state that affects degree college teachers' behavior to respond positively or negatively towards various hardware and software technologies and ultimately their use in teaching.
- **Degree College Teachers:** An Assistant or Associate professor working in a degree college affiliated to Mumbai University.

## AIM OF THE STUDY

The broad aim is to study degree college teachers' attitude towards using new technologies in teaching in relation to some variables.

## OBJECTIVES OF THE STUDY

1. To study degree college teachers' attitude towards using new technologies in teaching.
2. To compare degree college teachers' attitude towards using new technologies in teaching on the basis of gender. (Male/Female).
3. To compare degree college teachers' attitude towards using new technologies in teaching on the basis of designation. (Assistant professor/Associate professor).
4. To compare degree college teachers' attitude towards using new technologies in teaching on the basis of type of an institute. (Aided/Unaided).

## HYPOTHESES OF THE STUDY

1. There is no significant difference in degree college teachers' attitude towards using new technologies in teaching on the basis of gender. (Male/Female)
2. There is no significant difference in degree college teachers' attitude towards using new technologies in teaching on the basis of designation. (Assistant professor/Associate professor).
3. There is no significant difference in degree college teachers' attitude towards using new technologies in teaching on the basis of type of an institute. (Aided/Unaided)

## DESIGN OF THE STUDY

### METHODOLOGY OF THE STUDY

A causal Comparative method of descriptive research which comes under the quantitative paradigm has been used in the present research.

### SAMPLING TECHNIQUES

For the purpose of the present study the incidental sampling technique has been adopted for selecting degree college teachers.



**SAMPLE**

The sample of the study consists of 90 degree college teachers from different colleges affiliated to Mumbai University.

**TOOL USED IN PRESENT STUDY**

Tables 1 and 2 gives all information about the tool that was used for present research.

**Table 1: Tool Used in Present Research**

Name of the Tool	Author & Year	Type	Reliability		Total Number of Items	Maximum Score	Minimum Score
			Method	Index			
Attitude Towards Using New Technology Scale	Dr. Rajasekar S. (2007)	5 point scale	Spearman-Brown	0.95	30 (13 positive and 17 negative)	150	30

**Table 2: Interpretation of the Scores for the Attitude Towards Using New Technology in Teaching Scale**

Scores	Interpretation
30-40	Highly Unfavourable Attitude
41-65	Unfavourable Attitude
66-115	Neutral
116-140	Favourable Attitude
141-150	Highly Favourable Attitude

**DESCRIPTIVE AND INFERENCE STATISTICS**

Descriptive data analysis was done whereby measures of central tendency and dispersion were computed. For inferential analysis 't' statistics was calculated. Table 3 shows all details of Descriptive statistics for degree college teachers' attitude towards using new technologies in teaching and table 4 shows Inferential statistics for degree college teachers' attitude towards using new technologies in teaching.

**Table 3: Descriptive Statistics for Degree College Teachers' Attitude Towards Using New Technologies in Teaching**

Category	Sample Size (N)	Mean	Median	Mode	Standard Deviation
Males	32	120.43	117.5	115.64	13.31
Females	58	123.22	120.46	119.06	11.63
Total	90	121.94	118.98	117.35	12.19
Assistant Professors	64	123.26	121.89	119.43	11.06
Associate Professors	26	119.61	116.05	115.27	13.56
Total	90	121.94	118.97	117.35	12.19
Aided Colleges	66	120.63	120.40	118.73	10.99
Unaided Colleges	24	121.97	117.54	115.97	13.29
Total	90	121.94	118.97	117.35	12.19

**Table 4: Inferential Statistics for Degree College Teachers' Attitude Towards Using New Technologies in Teaching**

Category	Group	Total Sample (N)	Mean	Standard Deviation	Df	Table Value of 't'		't' Value	Level of Significance
						0.05	0.01		
Gender	Males	32	120.43	13.31	88	1.99	2.64	0.99	Not Significant
	Females	58	123.22	11.63					
Designation	Assistant Professors	64	123.26	11.06	88	1.99	2.64	1.29	Not Significant
	Associate Professors	26	119.61	13.56					
Type of Institute	Aided	66	120.63	10.99	88	1.99	2.64	0.44	Not Significant
	Unaided	24	121.97	13.29					



## FINDINGS

- The obtained values of 't' for degree college teachers' attitude towards using new technologies in teaching on the basis of gender is 0.99 which is less than the table value of 't'. Therefore there is no significant difference in degree college teachers' attitude towards using new technologies in teaching on the basis of gender.
- The obtained values of 't' for degree college teachers' attitude towards using new technologies in teaching on the basis designation is 1.29 which is less than the table value of 't'. Therefore there is no significant difference in degree college teachers' attitude towards using new technologies in teaching on the basis of designation.
- The obtained values of 't' for degree college teachers' attitude towards using new technologies in teaching on the basis of type of an institute is 0.44 which is less than the table value of 't'. Therefore there is no significant difference in degree college teachers' attitude towards using new technologies in teaching on the basis of type of an institute.

## DISCUSSIONS

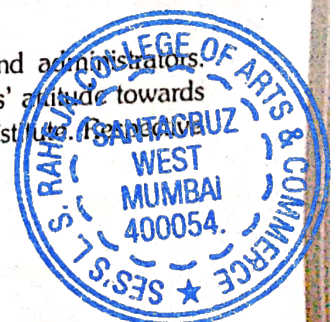
The present study revealed that there is no significant difference in degree college teachers' attitude towards using new technologies in teaching on the basis of gender. This means that both male and female teachers have similar attitude towards use of new technologies in teaching. The mean values for male and female teachers indicate that both of them have favourable attitude towards the use of new technologies in teaching. Gender as an attribute does not have any bearing on degree college teachers' attitude towards using new technologies in teaching. Irrespective of gender every teacher will always strive to give best to their students. Therefore there is no significant difference in degree college teachers' attitude towards using new technologies in teaching on the basis of gender.

The present study revealed that there is no significant difference in degree college teachers' attitude towards using new technologies in teaching on the basis of designation. This means that both Assistant and Associate professors have similar attitude towards use of new technologies in teaching. The mean values for Assistant and Associate professors indicate that both of them have favourable attitude towards the use of new technologies in teaching. Designation as an attribute does not have any bearing on degree college teachers' attitude towards using new technologies in teaching. Irrespective of designation every teacher will always strive to give best to their students. Therefore there is no significant difference in degree college teachers' attitude towards using new technologies in teaching on the basis of designation.

The present study revealed that there is no significant difference in degree college teachers' attitude towards using new technologies in teaching on the basis of type of an institute. This means that both Aided and Unaided college teachers have similar attitude towards use of new technologies in teaching. The mean values for Aided and Unaided college teachers indicate that both of them have favourable attitude towards the use of new technologies in teaching. Type of an institute as an attribute does not have any bearing on degree college teachers' attitude towards using new technologies in teaching. Irrespective of the type of institute every teacher will always strive to give best to their students. Therefore there is no significant difference in degree college teachers' attitude towards using new technologies in teaching on the basis of type of an institute.

## CONCLUSION

The results of the present study have some significant implications for teachers and administrators. Present study showed that there is no significant difference in degree college teachers' attitude towards using new technologies in teaching on the basis of gender, designation and type of institute.



colleges and heads of the institutes should motivate and provide all support to teachers for using new technologies in teaching. Without the whole hearted support of college and management such favourable attitude towards use of new technologies in teaching is of no use. Colleges should contribute positively to the training of teachers for such technologies. Colleges can do this by arranging workshops, seminars, faculty development program and so on in which teachers will get hand on training for using new technologies. All these positive experiences will help degree college teachers to develop more positive and favourable attitude towards new technologies in teaching.

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