

**RESEARCH PAPER****A Study of Impact of Information Communication Technology on Teacher Effectiveness of Teacher Educators****Buddhi Sagar Gupta**

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Email: bsguptaedu@gmail.comReceived: 4th January 2017, Revised: 23rd February 2017, Accepted: 25th February 2017**ABSTRACT**

This research paper is related to find out the Teacher Effectiveness of Teacher Educators in the context to their Attitude towards Information Communication Technology. For this study 200 Teacher Educators were randomly selected from Allahabad. As a tool for data collection Teacher Effectiveness scale and Attitude scale for Information Communication Technology constructed and standardized by researcher was used. From the study it is found that Information Communication Technology positively affects to teacher effectiveness while in this study found that teachers educators having high attitude and use of Information Communication Technology more effective than teachers having low attitude and use of Information Communication Technology.

Key words: Information Communication, Teacher Effectiveness, Teacher Educator

INTRODUCTION

An overview of recent literature on teaching effectiveness reveals no standard, commonly agreed upon definition or list of effective teaching qualities. Most studies tend to emphasize qualities such as knowledge and organization of the subject matter, skills in instruction, and personal qualities and attitudes that are useful when working with students (Braskamp *et al.*, 1984; Cashin, 1995). Some researchers define teacher effectiveness in terms of student achievement. Others focus on high performance ratings from supervisors. Still others rely on comments from students, administrators, and other interested stakeholders.

TEACHER EFFECTIVENESS

Teaching is a challenging profession and only those Teacher Educators can shoulder the heavy responsibilities of nation building that are adequately prepared and have sound professional effectiveness. Teacher Educators are expected to use the best practices and strategies to meet challenges and demands of their career. If the Teacher Educators are well trained and highly motivated, learning will be enhanced. The teaching profession demands a clear set goal, love for profession and obviously the more favourable attitude towards the profession.

According to Wong and Wong (2001) "Effective Teacher Educators manage their classroom." and "Ineffective Teacher Educators discipline their classrooms." Although there is no complete and sufficient set of behaviors that all Teacher Educators must develop, expert Teacher Educators differ from novice Teacher Educators and effective Teacher Educators differ from ineffective Teacher Educators in ways that are observable and measurable (Berliner, 1986). These differences seem to fall within three broad areas of teacher effectiveness: personal delivery style, knowledge and accuracy of academic content, and classroom management skills.

INFORMATION COMMUNICATION TECHNOLOGY

The 'Compact Oxford English Dictionary' defines Information Communication Technology as, "the study or use of systems such as computers and telecommunications for storing, retrieving, and sending information." UNESCO (1998) considers Information Communication Technology as, "scientific, technological and engineering disciplines, and the management techniques used in information handling and processing; their application, computers and their interactions with men

and machines; and associated social, economical and cultural matters”.

As technology use continues to increase in society, educators must also prepare for its use within the classroom. This involves all levels of education including secondary schools as the role of the secondary school teacher is evolving from that of a giver of information to that of a facilitator of student learning. Advances in technology have caught the attention of many educators and researchers who have discussed and studied the potential of using computers in education (Roblyer, 1989; Kozma, 1991;

Teacher Educators can use technologies that are of huge benefit to them and increase their effectiveness. For example, computers have considerable potential to support Teacher Educators, both in their routine work such as reducing the time occupied by the administration associated with it, and in their continuing training and development. Teacher Educators can use it to assist in developing lesson plan materials, worksheets, and bulletin board materials or sending professional-looking notes home to parents. A review of several empirical studies in the United States indicated that computers generally have positive effects on student achievement as students show gains in achievement on researcher-constructed tests, standardized tests, and national tests (Schacter, 1999). Information Communication Technology can be used in order to develop non-cognitive competences like practical, emotional or social skills beyond pure cognitive knowledge.

The teacher faces a greater challenge today to keep pace with the continued progress in information resources. Changes are inevitable and therefore a teacher is effective if he/she can adapt to the changing scenario. No amount of technological up gradation of educational institutions will change the performance of our students unless the Teacher Educators have the right attitude towards its adoption, use and application in the teaching-learning process. The results of the study could help Teacher Educators to prepare and provide direction for professional development of the Teacher Educators for developing the right kind of attitude towards IT for efficient and effective teaching.

OBJECTIVES

The present study is aimed at achieving the following objectives:

1. To Study of Impact of Information Communication Technology on Teacher Effectiveness of Teacher Educators.
2. To Study the Teacher Effectiveness of Teacher Educators of low and medium attitude toward Information Communication Technology.
3. To Study the Teacher Effectiveness of Teacher Educators of medium and high attitude toward Information Communication Technology.
4. To Study the Teacher Effectiveness of Teacher Educators of high and low attitude toward Information Communication Technology.

NULL HYPOTHESES OF THE STUDY

1. There is no significant difference in teacher effectiveness of Teacher Educators among low, medium and Attitude toward Information Communication Technology.
2. There is no significant difference in Teacher Effectiveness of Teacher Educators of low and medium attitude toward Information Communication Technology.
3. There is no significant difference in Teacher Effectiveness of Teacher Educators of medium and high attitude toward Information Communication Technology.
4. There is no significant difference in Teacher Effectiveness of Teacher Educators of high and low attitude toward Information Communication Technology.

RESEARCH METHOD

Descriptive method of research was employed for the present study.

POPULATION

Teacher Educators from Allahabad, Uttar Pradesh (U.P.) constituted the target population in this study.

SAMPLE

A total of 200 hundred Teacher Educators were taken by random sampling technique from Allahabad district, Uttar Pradesh.

TOOLS

1. A teacher effectiveness scale developed by the researcher.
2. An attitude scale towards Information Communication Technology developed by the researcher.

USED STATISTICS

T-test and Analysis of variance were used as statistical Analysis.

ANALYSIS AND INTERPRETATION

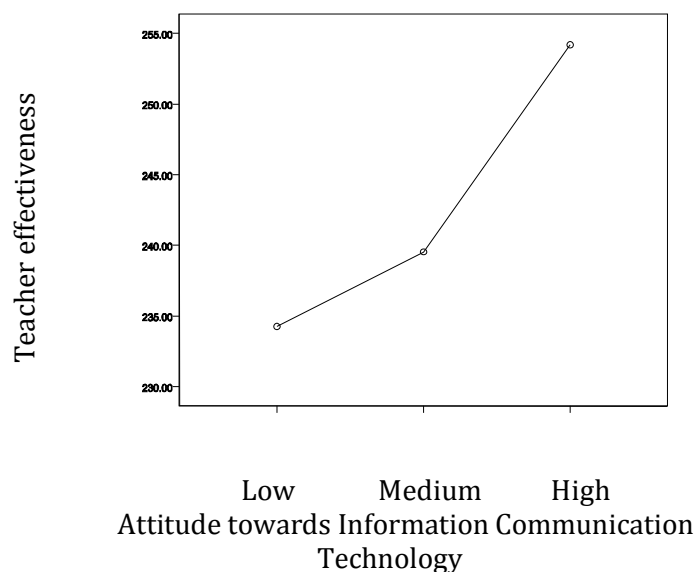
Table 1: ANOVA of Teacher effectiveness of Teacher Educators of Low, Medium and High Attitude toward Information Communication Technology

Source	Sum of Squares	df	Mean Square	F
Between Groups	14104.23	2	7052.12	105.70*
Within Groups	13142.88	197	66.71	
Total	27247.12	199		

*Significant at .01 significance level

From the results of the above table 1, it can be seen that, a significant difference was observed among Teacher effectiveness of Teacher Educators having low, medium and high Attitude toward Information Communication Technology is $F=105.70$ at .01 level of significance. Hence, the null hypothesis is rejected that is 'There is no difference among Teacher effectiveness of Teacher Educators having low, medium and high Attitude toward Information Communication Technology and alternative hypothesis is accepted that is 'There is difference among Teacher effectiveness of Teacher Educators having low, medium and high Attitude toward Information Communication Technology.' It means that, the Teacher Educators having low, medium and high Attitude toward Information Communication Technology are different in their teaching effectiveness. The mean scores of Teacher effectiveness of Teacher Educators having low, medium and high Attitude toward Information Communication Technology are presented in the following figure.

Graph 1: Mean Plot of Teacher effectiveness of Teacher Educators having Low, Medium and High Attitude toward Information Communication Technology



After the interpretation of analysis of variance it is necessary to know that in which mean significant difference in teacher effectiveness of Teacher Educators. So that it is determined the following objectives related to teacher effectiveness of Teacher Educators having low, medium and high Attitude toward Information Communication Technology of-

1. To compare the teacher effectiveness of Teacher Educators having low and medium Attitude toward Information Communication Technology.
2. To compare the teacher effectiveness of Teacher Educators having medium and high Attitude toward Information Communication Technology.
3. To compare the teacher effectiveness of Teacher Educators having high and low Attitude toward Information Communication Technology.

After the analysis of variance t-test is used to study about above objectives and calculated t-value is given below Table.

Table 2: Mean and S.D. and T-value of teacher effectiveness of Teacher Educators having Low, Medium and High Attitude toward Information Communication Technology

Sr.	Group	N	Mean	S. D.	D	Std. Error	t-Value
1	Low	66	234.24	9.51	5.28	1.51	3.49*
	Medium	68	239.52	7.91			
2	Medium	68	239.52	7.91	14.65	1.27	11.46*
	High	66	254.18	6.85			
3	High	66	254.18	6.85	19.93	1.44	13.88*
	Low	66	234.24	9.51			

*Significant at .01 significance level

It is observed from Table 2 that the Mean Difference of Teacher Educators having Low and Medium Attitude toward Information Communication Technology are 5.28 with Standard Error 1.51 on teacher effectiveness. The calculated t-value is 3.49 which are greater than table value even at .05 levels. So, it is significant at .05 levels. It indicates that there exists significant difference between low and medium Attitude toward Information of Teacher Educators. So it stated that Teacher Educators having Medium Attitude toward Information Communication Technology have better Teaching effectiveness (239.52) than Teacher Educators having low (234.24) Attitude toward Information Communication Technology .

Table 2 shows that the Mean Difference of Teacher Educators having Medium and high Attitude toward Information Communication Technology is 14.65 with Standard Error 1.27 on teaching effectiveness. The calculated t-value is 11.46 which is greater than table value even at .01 levels. So, it is significant at .01 levels. It indicates that there exists significant difference between medium and high Attitude toward Information of Teacher Educators. So, it stated that Teacher Educators having high Attitude toward Information Communication Technology have better teacher effectiveness (254.18) than Teacher Educators having medium (239.52) Attitude toward Information Communication Technology .

From the above table 2 shows that the Mean Difference of Teacher Educators having High and low Attitude toward Information Communication Technology are 19.93939 with Standard Error 1.44 on teaching effectiveness. The calculated t-value is 13.88 which is greater than table value even at .01 levels. So, it is significant at .01 levels. It indicates that there exists significant difference between high and low Attitude toward Information of Teacher Educators of Secondary level. So it stated that Teacher Educators having high Attitude toward Information Communication Technology level have better teacher effectiveness (254.18) than Teacher Educators having low (234.24) Attitude toward Information Communication Technology .

EDUCATIONAL IMPLICATIONS

The results of this study may be useful in identifying Teacher Educators' attitudes towards and approaches for using the computer technology resources provided for them and also identifying the motivational factors required for effective teaching. The information generated could also be

utilized for suggesting better ways of training, motivating and equipping instructors with strategies, techniques, and approaches for increased teacher effectiveness. Policy makers and professional development designers, among others, can be benefited from empirically derived information about teacher effectiveness, attitudes, and motivation by incorporating such information in designing and implementing the efficient and effective training programs for prospective Teacher Educators as well as working Teacher Educators. In modern era it is necessary that every teacher educator should use Information Communication Technology in their teaching.

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