



ATTITUDE OF TEACHER EDUCATORS TOWARDS INFORMATION AND COMMUNICATION TECHNOLOGY

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Abstract:

The main goal of this paper is to find out about the aptitude of teacher educators towards ICT. Normative survey method has been used and by using random sampling technique 300 teacher educators were selected. Gathered data was analyzed by using the statistical techniques. The results show that there is significant difference between male and female teacher educators in their attitude towards ICT, and also with respect to their subject taught. The results show that there is no significant difference in the Attitude of teacher educators towards ICT with respect to their locality of college.

Key Words: Attitude towards ICT, Normative Survey Method & Random Sampling Technique.

Introduction:

In the present era of information and communication, there is revolution information and communication technologies which offer unprecedented opportunities to enhance effectiveness and expand access to high quality education. Information Technology is a new medium, a new way of representing communication and working with information. It is both an important area of study in its own right and a tool that is being integrated into the everyday life of more and more people. Today information and knowledge are the motivating power for social development. In future the wealth and power of nation, equality of individual life will be valued in proportion to intellectual assets such as technology, information and knowledge. Hence, the investigator has taken a study on attitude of teacher educators towards information and communication technology.

Anastai (1990) defines Attitude as a tendency to react favourably or unfavourably towards a designated class of stimuli, such as a national or ethnic group, a custom, or an institution. It is evident that when so defined, Attitudes cannot be directly observed but must be inferred from our behavior both verbal and nonverbal. In more objective terms, the concept of Attitude may be said to relate to response consistency with regard to certain categories of stimuli. In actual practice, the term 'Attitude' has been most frequently associated with social stimuli and with emotionally tended responses.

Edward and David (1991) define Attitude as a psychological construct or phenomenon that cannot be directly observed rather, its existence is inferred. Although there is no set definition for Attitude, there is considerable commonality among the various definitions that do exist in the literature. It is a predisposition to act, a state of readiness to act based on past experience, or a predisposition to act based on past evaluations. It is not the act itself. Attitudes are learnt, they are not innate. Attitudes are generally not transient; rather they tend to be enduring and consistent.

Attitude towards ICT: It is referred as the tendency to react favourably/positively or unfavourably/negatively towards ICT.

Need and Importance of the Study:

Information Technology literacy is becoming essential for the new educator, who has to deal with new studies, in a new school, using new media, namely the internet in a new learning environmental with free access to a large amount of information resources. Realizing this importance of Information Technology, the IT education in India is being incorporated as a part of the academic curriculum in schools, colleges and universities. At the school level, the basics of Information Technology and training on computer usage are focused upon to make the school outgoing children IT literate. At the college and university levels, the study of IT application in all disciplines is focused.

The National curriculum framework for school education developed by National Council for Educational Research and Training (NCERT) recommended. IT rich school with substantial technological input. The council has worked out a blueprint for smart schools, which the Ministry of Human Resource Development (MHRD) proposes to establish all over the country albeit in limited numbers. Apart from working out a conceptual framework for this school, the technological support and expenditure involved there in the changing role of the teacher, nature of learning programmes, exemplar activities for students and skills expected by them in different grades and finally, imperatives for teachers council for IT education has also been recommended for developing IT course for various levels of training to teachers.

The teachers must become knowledge about technology and become self confident enough to integrate it effectively in the class room, and this motivation can easily be provide to them at the time of their pre-service training. This point to the need for teacher educators themselves to acquire proficiency in the various means of ICT. The national council for teacher education is striving for the promotion of use of Information and Communication Technology in pre-service teacher education course, who would, in-turn, contribute in making every child IT literate. Keeping all these in view the researcher is inserted in study the Teacher Educators attitude and aptitude towards ICT.

Review of Related Literature:

Mehra and Vandana (2007) reviewed on "Teacher's attitude towards computer use". Implications for emerging technology, Implementation in Educational institutions". The findings revealed that teachers possessed fairly positive attitude towards computer uses but majority of the teachers need to be provided training for using computers in instructional settings.

Tholappan and Krishnakumar (2011) attempted a Study on Attitude of Higher Secondary Students towards Computer Assisted Instruction. The major findings of the study were nearly 16% of students are having high level attitudes towards CAI. Both male and female students are having equal attitude towards CAI. The attitude of students towards CAI who belong to urban residential background was found to be higher than the students with rural background. The attitude of students towards CAI government schools was found to be higher than the students form Aided Schools.

Definition of Key Term:

The key terms of the title are defined below for their operational meaning in the study and for better understanding of the study.

Information and Communication Technology:

ICT can be broadly being defined as a set of activities that is facilitated, by electronic means, the capturing, storage, processing, transmission, and display of information. This paper uses the term 'Information and Communication Technologies'

(ICT) to encompass the production of both computer hardware and software as well as the means of transferring the information in digital form.

Attitude:

Attitude is “a mental set to respond to a situation with a prepared reaction whereas sets may be Information and Communication Technology”.

“An attitude can be defined as an enduring organization of motivational, emotional, perceptual and process with respect to some aspect of the individual’s world”.

Statistical Techniques Used:

In the present study the investigator had applied the following statistical techniques- descriptive analysis (Mean and Standard Deviation) and differential analysis (‘t’ test and F test) to analyze the attitude of teacher educators towards information and communication technology.

Method and Sample of the Study:

Normative survey method is adopted in this study; random sampling method is used for collection of data. The present study consists of 300 teacher educators from Government, Government Aided and Self finance colleges.

Tool used for the present Study:

The following tools used in the present study

- Teacher educator Attitude towards ICT tool constructed and validated by the investigator (2012)

Description of the Tools:

The most common and repeatedly used scales for Attitude measurement are Likert type. In the present study also Likert method is adopted. Likert developed a type of scale that is easier to construct while yielding equally satisfactory reliability. The Likert type scale begins with a series of statements each of which expresses an Attitude that is either clearly favourable or clearly unfavourable. Items are selected on the basis of the responses which are usually expressed in terms of the following five categories. Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D) and Strongly Disagree (SD). To score the scale, the response options are credited 5,4,3,2 and1 from the favourable to unfavourable end. The sum of the credits for all the items represents the individual’s total score, which must be interpreted in terms of empirically established norms.

Objectives of the Study:

1. To find out whether there is any significant difference between the Attitude of teacher educators towards Information and Communication Technology based on the background variables; namely
 - a) Gender
 - b) Subject taught
 - c) Locality of college

Hypotheses of the Study:

1. The level of attitude of teacher educators towards Information and Communication Technology is less favourable.
2. There is no significant difference in the Attitude of teacher educators towards Information and Communication Technology with respect to their gender.
3. There is no significant difference in the Attitude of teacher educators towards Information and Communication Technology with respect to their subject taught.
4. There is no significant difference in the Attitude of teacher educators towards Information and Communication Technology with respect to their locality of college.

Data analysis and Interpretation:

Hypothesis Testing 1:

Table 1

The levels of Attitude of teacher educators towards Information and Communication Technology

Variable	Sample	Mean	SD
Attitude	300	115.21	14.62

From the Table 1, the mean Attitude for the whole sample is 115.21 for a maximum of 150 that is 76.8 percentage. It is inferred that the level of Attitude of teacher educators towards Information and Communication Technology is favourable.

Hypothesis Testing 2:

Table 2

Significant difference in the Attitude of teacher educators towards Information and Communication Technology based on gender

Gender	N	Mean	SD	t	Significant at 0.05 level
Male	128	125.61	14.931	13.452	Significant
Female	172	107.47	8.182		

From the table 2, In order to find out the significant difference in the attitude of teacher educators towards Information and Communication Technology based on gender 't' value was calculated. The calculated 't' value is found to be 13.452 which is greater than the table value and significant at 0.05 level.

Hypothesis Testing 3:

Table 3

Significant difference in the Attitude of teacher educators towards Information and Communication Technology based on subject taught

Subject Taught	Sum of Squares	df	Mean Square	F	Significant at 0.05 level
Between Groups	3859.938	2	1929.969	9.546	Significant
Within Groups	60047.832	297	202.181		

From the table 3, In order to find out the significant difference in the attitude of teacher educators towards Information and Communication Technology based on subject taught 'F' value was calculated. The calculated 'F' value is found to be 9.546 which is significant at 0.05 level. The mean scores of sub groups are compared for significance of difference and 't' test is applied. The micro analysis is given in the table 3.

Table 4

Comparison of the Mean Attitude of Teacher educators towards Information and Communication Technology based on subject taught

Sub Sample	N	Mean	SD	t	Significant at 0.05 level
Language	79	110.29	13.879	1.387	Not Significant
Arts	65	113.26	11.329		
Arts	65	113.26	11.329	2.481	Significant
Science	156	118.51	15.410		

Science	156	118.51	15.410	3.992	Significant
Language	79	110.29	13.879		

From the Table 4, it reveals that the calculated 't' values, 1.387 is not significant and 2.481 and 3.992 are significant at 0.05 level. It implies that there is significant difference between Arts and Science, Science and Language subject taught teacher educators. There is no significant difference between Language and Arts subject taught teacher educators.

Hypothesis Testing 4:

Table 5

Significant difference in the Attitude of teacher educators towards Information and Communication Technology based on locality of college

Locality of college	N	Mean	SD	t	Significant at 0.05 level
Rural	168	114.95	14.822	0.344	Not Significant
Urban	132	115.54	14.408		

From the table 5, In order to find out the significant difference in the attitude of teacher educators towards Information and Communication Technology based on locality of college 't' value was calculated. The calculated 't' value is found to be 0.344 which is lesser than the table value and significant at 0.05 level.

Findings of the Study:

The following are the important findings obtained from the present investigation.

1. The level of Attitude of teacher educators towards Information and Communication Technology is favourable.
2. There is significant difference in the Attitude of teacher educators towards Information and Communication Technology based on gender.
3. There is significant difference between Arts and Science, Science and Language subject taught teacher educators. There is no significant difference between Language and Arts subject taught teacher educators.
4. There is no significant difference in the Attitude of teacher educators towards Information and Communication Technology with respect to their locality of college.

Conclusion:

The present investigation has revealed that the attitude of teacher educator towards Information and Communication Technology are found favourable. Therefore, In order to improve their the level of ICT knowledge, the integration of computers in teacher education still to be effectively implemented, monitored, encouraged and modified from time to time to go on par with the advanced countries in the world in the field of teacher education.

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