

ATTITUDE OF TEACHER TRAINEES TOWARDS INFORMATION AND COMMUNICATION TECHNOLOGY

Research
Paper

ABSTRACT

The use of Information and Communication Technologies has expanded dramatically within the present decade. New technologies are becoming integrated increasingly into educational settings. In the present context, it is essential to know how the attitude of teacher trainees towards Information and Communication Technology can promote the usage of Internet and other ICT tools in the teaching-learning process. The aim of the present study is to find out the attitude of teacher trainees towards information and communication technology (ICT). The study was conducted among 665 B.Ed., teacher trainees of Puducherry Union Territory. The results indicate positive direction of the attitude of B.Ed., teacher trainees towards ICT. The gender, type of college and subject specialization of B.Ed., teacher trainees influence their attitude towards Information and Communication Technology.

INTRODUCTION

Information and Communication Technology (ICT) is the study of the technology used to handle information and aid communication. The use of Information and Communication Technologies has expanded dramatically within the present decade. New technologies are becoming integrated increasingly into educational settings. Information and Communication Technology has created new opportunities for teachers and learners. Teacher education institutions are facing the challenge of preparing a new generation of teachers who will use the new learning tools in their teaching practice effectively. For utilizing all the benefits of ICT in learning, it is essential for the trainers and the teacher-trainees to possess the skills and competencies to use the ICT tools. Though the teacher trainees are trained in various skills in the use ICT tools, developing a positive attitude among them towards ICT will bring a drastic change in the utilization of ICT tools in the teaching-learning process. In the present study, the researchers have made an attempt to find out whether the attitude towards ICT plays a significant role in the usage of an ICT tool, namely Internet.

REVIEW OF RELATED STUDIES

The studies related to attitude towards Information and Communication Technology which were carried out in India and abroad are presented below.

Narayanasamy (2000) found that the teacher trainees of DIETs and TTIs showed positive attitudes towards computers in education. Abu Samak Zeinab (2006), Albirini (2006), Phelps and Maddison (2008) found that teachers had positive attitudes towards information and communication technology. Anbuchezhian (2006), Pinnock and Asburn (2006) showed that teacher educators and student teachers had favourable attitude towards ICT. Archambault and Helene (2007) revealed that the teachers had relatively positive attitude towards ICT in their professional practice. Spaulding and Michael Wayne (2007) found that pre-service teachers had greater level of confidence in using technology to improve teaching and learning than the in-service teachers. Liu and Che-Hao (2008) found that there were significant relationships among students' reported attitudes towards ICT based on the type of the College. The study of Martin and Laura Kathleen (2009) revealed that Oklahoma agricultural educators held agreeable attitudes towards utilizing technology in the classroom. Pamuk and Peker (2009)

Dr. A.L. Jerald Antony Raj

*Assistant Professor,
Pope John Paul II College of Education,
Puducherry.*

Dr. R. Krishnaraj

*Professor, Department of Education,
Alagappa University, Karaikudi.*

concluded that pre-service teachers had relatively high scores on computer attitude.

NEED AND SIGNIFICANCE OF THE STUDY

Information and Communication Technologies have brought new possibilities into teacher education. The infusion of ICT into the teacher education programme will help the future teachers to cope with the paradigm shift in learning. Information and Communication Technologies exemplified by the Internet and interactive multimedia are obviously of great significance for teacher education. They need to be effectively integrated into the formal classroom teaching and learning conditions. The integration of ICT in education in general and teacher education in particular is a need of the day. Teacher education institutions have to play a major role in shaping the teacher trainees with adequate knowledge and training in the use of ICT tools in their classrooms. The effective and efficient use of ICT depends largely on technically competent teachers. The positive attitude among teacher trainees towards Information and Communication Technology can promote the usage of Internet and other tools of ICT in the teaching-learning process effectively. Hence, in this context, it is essential to know how the attitude of teacher trainees towards Information and Communication Technology can promote the usage of Internet and other ICT tools in the teaching-learning process.

OBJECTIVES OF THE STUDY

The objectives of the present study are stated below.

1. To study the attitude of B.Ed., Teacher trainees in Puducherry Union Territory towards Information and Communication Technology.
2. To find out the significant difference if any in the sub-samples of Sex, Age, Type of College, Location of the college, Subject of specialization and Internet usage in the attitude towards Information and Communication Technology.

HYPOTHESIS OF THE STUDY

There exists no significant difference between (i) male and female (ii) age of below 24 years and 24 years & above (iii) self-financing and Government (iv) rural and urban (v) Arts and Science (vi) teacher trainees using and

not using internet teacher trainees in their attitude towards information and communication technology.

Research
Paper

RESEARCH METHOD

In the present study, the survey method is used for data collection.

POPULATION OF THE STUDY

In the present study, teacher trainees studying in 31 Colleges of Education in Puducherry Union Territory were taken as the population of the study.

SAMPLE OF THE STUDY

In the present study, 10 Colleges of Education in Puducherry Union Territory were selected by means of the stratified random sampling technique. The stratification was done on the basis of sex, type of College and geographical location of the College. The data were collected from teacher trainees studying in these Colleges of Education. Thus 665 B.Ed., teacher trainees from 10 Colleges of Education in Puducherry Union Territory formed the sample of the study.

RESEARCH TOOL

Information and Communication Technology Attitude Scale constructed and validated by the researcher was used for collecting the data. 't' test was used to analyze and interpret the data.

RESULTS AND DISCUSSION

The descriptive data regarding the attitude of teacher trainees towards Information and Communication Technology are presented below in tabular form.

Table 1

ATTITUDE OF TEACHER TRAINEES TOWARDS INFORMATION AND COMMUNICATION TECHNOLOGY: MEAN AND SD VALUES

Variable	Maximum Score	Mid Value	Mean	SD
ICT Attitude	260	130	199.03	20.31

From the table, it is known that the B.Ed., teacher trainees in general have more favourable attitude towards Information and Communication Technology as revealed by the mean value 199.03 which is far above the mid value 130 of the maximum score 260.

The B.Ed., teacher trainees appreciate the positive aspects of Information Communication Technology. The teacher trainees are of the view that ICT provides motivation for all the learners of different age. ICT based simulation techniques enable the learners to develop attention and interest in learning. Digital networks give a wide range of technical flexibility for learning. Information and communication technologies have an impact on learning styles. Online learning requires self-motivation for its success. Web-based learning is an interactive form of learning. ICT is useful for the teachers to improve their professional skills. Its applications are used to facilitate the teacher-oriented arrangements of the learning process and to organize the thinking process of the learners.

Table 2

COMPARISON BETWEEN TEACHER TRAINEES ON THE BASIS OF SEX, AGE, TYPE OF COLLEGE, LOCATION OF COLLEGE, SUBJECT AND INTERNET USAGE

Variable		Mean	S.D	N	't'	Level of Significance
Sex	Male	195.53	20.52	180	3.97	0.01
	Female	202.52	20.1	485		
Age	Below 24 years	200.85	20.83	419	0.37	N.S
	24 years & above	200.25	19.78	246		
Type of College	Self-financed	201.55	20.58	517	2.18	0.05
	Govt	197.41	19.64	148		
Location of College	Rural	201.59	20.2	326	1.19	N.S
	Urban	199.71	20.65	339		
Subject	Arts	202.92	20.36	281	2.48	0.05
	Science	198.95	20.36	384		
Internet Usage	Using Internet	202.64	20.25	304	2.34	0.05
	Not using Internet	198.94	20.46	361		

N.S. – Not significant

Table-2 reveals that the male and female teacher trainees differ in their attitude towards Information and Communication Technology as evidenced by the 't' value 3.97 which is significant at 0.01 level of confidence. The teacher trainees studying in Self-financing colleges have more favourable attitude towards ICT than the teacher trainees of Government colleges as revealed by the 't' value 2.18 which is significant at 0.05 level. Similarly, the teacher trainees of Arts subjects have a more favourable attitude towards ICT than the teacher trainees of Science subjects as revealed by the 't' value 2.48 which is significant at 0.05 level. Also, the teacher trainees using Internet have a more positive attitude towards ICT than the teacher trainees not using Internet as revealed by the 't' value 2.34 which is significant at 0.05 level. No significant differences are found between teacher trainees in their attitude towards Information and Communication Technology with respect to Age and Location of the Colleges.

IMPLICATIONS OF STUDY

The present study reveals the favourable attitude shown by the B.Ed., teacher trainees studying in the Colleges in Puducherry Union Territory towards Information and Communication Technology. The present study shows that the importance of ICT in education has been understood by the teacher trainees. As Information and Communication Technology provides more scope for individualized learning and serves as a potential tool for learning, the B.Ed., teacher trainees appreciate the role of ICT in education in general and teaching-learning in particular. The positive attitude shown by the B.Ed., teacher trainees must be consolidated for further strengthening of ICT integration in the teaching and learning process. In this context, the Colleges of Education may organize conferences, seminars and symposia in the area of ICT in order to provide more knowledge and information about Information and Communication Technology. This may lead to greater application of ICT by the B.Ed., teacher trainees when they become teachers in future.

It is also suggested that the educational agencies such as UGC and MHRD may provide financial assistance

Continued on page 11