#### STUDENT TEACHERS ATTITUDE TOWARDS ICT

Ms Rekha Chavhan

Department of education

S.N.D.T.Women's University, Mumbai

rekhachavhan@yahoo.co.in

#### **Abstract**

The revolution triggered by Information and communication technologies in all walks of life has also touched the education sector. ICT is universally acknowledged as an important catalyst for social transformation and national pogress. ICT is a major factor in shaping new global economy and producing rapid changes in the society. ICT can play a powerful role to improve the quality of teacher education, enable the teacher to meet the challenges of globalization. Our education system is acquiring large amount of equipment but it is also true that there is inadequate understanding on the part of teachers because of their unfavorable attitude towards ICT. Therefore there is need to study the attitude of B.Ed student teachers towards ICT because they are the future teachers who is going to shape our future generation therefore it was thought to study Attitude of B.Ed student Teachers towards ICT. The student teachers belonging to different medium, area of locality, faculty may have different attitudes as the student characteristics, contents, nature of academic activities differs. Thus, this study is an endeavor to study Attitude of B.Ed student Teachers towards ICT. The study covered 400 student teachers from Mumbai and Thane district. The study seeks to answer the following questions: What is the attitude of B.Ed student teachers towards ICT, Is there any difference in attitude of student teacher on the basis of their medium of instruction, area of locality, faculty.

**Keyword:** *Attitude* ,*ICT* 

### **Introduction:**

Information and communication technology (ICT) has brought revolution in the field of education. ICT is widely used effectively in the current education system all over the world. Although we live in a technologically fast changing world yet our schools are following traditional methods of teaching without reaping the benefits of ICT in learning.

This is a fact that ICT is not an integral part of our teacher education programme, although there is clear recommendation of NCTE and UGC to use ICT in teacher education programmes.

Information Technology is defined as the study or use of electronic equipment, especially computers for sorting, analyzing and sending out information. Communication is process of sending, receiving and exchanging information. The study was carried out with following objectives.

## **Objectives of the Study:**

- 1. To study student teachers' attitude towards ICT.
- 2. To compare medium wise difference in attitude towards ICT of students teachers belonging to different faculties.
- 3. To compare medium wise difference in attitude towards ICT of students teachers belonging to different areas.
- 4. To compare medium wise difference in attitude towards ICT of computer trained and untrained teachers.
- 5. To compare area wise difference in attitude towards ICT of computer trained and untrained teachers.
- 6. To compare area wise difference in attitude towards ICT of students teachers belonging to different faculties.
- 7. To compare faculty wise difference in attitude towards ICT of computer trained and untrained teachers.

#### **Methodology of the study:**

In the present study the researcher made an attempt to understand and describe the present status of attitude of student teachers towards ICT therefore descriptive method has been used .Considering the nature of problem under investigation and the nature of the data for the study, survey method was used for data collection.

## Sample: its size, nature and technique:

For the purpose of present study the sample of 372 student teachers studying in six different colleges of education affiliated to S.N.D.T Women's University from Mumbai and Thane district were drawn.

Samples were selected at two stages. At first stage colleges of teacher education were selected by systematic random sampling technique and at second stage student teachers were selected by cluster sampling technique.

#### **Tools for data collection:**

The following tools were used for data collection.

I. **Personal data sheet**: This tool has been used to collect student teachers information like medium, faculty, area of the college.

II. Attitude towards ICT scale: This tool is prepared by Ms Sandhya Bhise (2007). The tool has total 38 statements out of which there are 21 positive and 17 negative statements. The cronbach alfa and split half methods were adopted for calculation of reliability coefficient and the value found to be 0.81 & 0.78 respectively. The high reliability coefficient of correlation shows that the present tool is a reliable device to asses Attitude towards ICT of B.Ed student teachers.

#### Administration of the tool and data collection

The colleges were personally visited for collection of data after seeking permission from principals of the colleges concerned. Rapport was established with the respondents before administration of the tool. Necessary directions were given to fill all the items in the scale. To elicit the actual responses it was also announced that their responses will be kept confidential and will be used only for research purpose.

## **Analysis and Interpretation of Data**

The data has been analyzed by using

I. Descriptive Analysis: this includes Measures of central tendencies and Variability

II. Inferential Analysis: This include Two way ANOVA .

## **Testing of Hypotheses:**

The null hypotheses were tested using statistics, which is discussed in the following section.

1. There is no medium wise difference in attitude towards ICT of student teachers belonging to different areas.

The hypothesis was tested using Two way Analysis of variance. The following table indicates statistics for Two way ANOVA.

Source of	Sum of	Degree of	Mean of	F ratio	LOS
variance	squares	freedom	Sum of		
	(SS)	(DF)	squares		
	2002		(MSS)		
Row	2181.59	1	2181.56	34.02	0.01
(Medium)	12.3	L A	AALE	1:00	
Column	<b>77.</b> 97	1	77.97	1.22	NS
(faculty)	01/2	43		-,,	
Interaction	1243.16	1	1243.16	19.39	0.01
effect	1				

**Interpretation:** The obtained value of F is more than tabulated value at both the levels i.e 6.70 at 0.01 level and 3.86 at 0.05 level therefore null hypotheses is rejected

There is significant difference in attitude towards ICT of student teachers of English and Marathi medium students. Marathi medium students have favorable attitude towards ICT than English medium students.

The obtained value of F is less than tabulated value at both the levels i.e 6.70 at 0.01 level and 3.86 at 0.05 level therefore null hypotheses is accepted.

There is no significant difference in attitude towards ICT of student teachers of Arts and other than Arts faculty.

The obtained value of F is more than tabulated value at both the levels i.e 6.70 at 0.01 level and 3.86 at 0.05 level therefore null hypotheses is rejected.

There is significant difference in attitude towards ICT of student teachers considering the interaction between medium and faculty.

# 2. There is no medium wise difference in attitude towards ICT of student teachers belonging to different faculties.

The hypothesis was tested using Two way Analysis of variance. The following table indicates statistics for Two way ANOVA.

Source of	Sum of	Degree of	Mean of	F ratio	LOS
variance	squares	freedom	Sum of		
	(SS)	(DF)	squares		
12.75	200		(MSS)		
Row	2181.59	1	2181.56	34.02	0.01
(Medium)	ANA	to AL	$\Delta \Delta \Pi F$	1.56	
175-171		401.0	INML	7	
Column	77.97	1	77.97	1.22	NS
(Faculty)	1	N.	STARTER ST		
1/6/					
Interaction	123.08	1	123.08	1.83	NS
effect	The Part				
400		DATES	of the 2000 I	41.77	

**Interpretation**: The obtained value of F is more than tabulated value at both the levels i.e 6.70 at 0.01 level and 3.86 at 0.05 level therefore null hypotheses is rejected

There is significant difference in attitude towards ICT of student teachers of English and Marathi medium students. Marathi medium students have favorable attitude towards ICT than English medium students.

The obtained value of F is less than tabulated value at both the levels i.e 6.70 at 0.01 level and 3.86 at 0.05 level therefore null hypothesis is accepted.

There is no significant difference in attitude towards ICT of student teachers of different faculty.

The obtained value of F is less than tabulated value at both the levels i.e 6.70 at 0.01 level and 3.86 at 0.05 level therefore null hypotheses is accepted.

There is no significant difference in attitude towards ICT of student teachers considering the interaction between medium and area.

## 3. There is no medium wise difference in attitude towards ICT of computer trained and untrained student teachers.

The hypothesis was tested using Two way Analysis of variance. The following table indicates statistics for Two way ANOVA.

Source	Sum of	Degree of	Mean of	F ratio	LOS
of variance	squares	freedom	Sum of		
2-11-1	(SS)	(DF)	squares	D-I	
15	TI	W/W	(MSS)	IN.	
Row	2181.59	1	2181.56	34.02	0.01
(Medium)	R.A.	y .	(AN2)	1	
Column	56.7	1	56.7	0.84	NS
Comp.Training)	r-Re	view	boy	live	mal

**Interpretation**: The obtained value of F is more than tabulated value at both the levels i.e 6.70 at 0.01 level and 3.86 at 0.05 level therefore null hypothesis is rejected

There is significant difference in attitude towards ICT of student teachers of English and Marathi medium students. Marathi medium students have favorable attitude towards ICT than English medium students.

The obtained value of F is less than tabulated value at both the levels i.e 6.70 at 0.01 level and 3.86 at 0.05 level therefore null hypothesis is accepted.

There is no significant difference in attitude towards ICT of student teachers who have taken previous computer training and those who have not taken any previous computer training.

The obtained value of F is less than tabulated value at both the levels i.e 6.70 at 0.01 level and 3.86 at 0.05 level therefore null hypotheses is rejected.

There is no significant difference in attitude towards ICT of student teachers considering the interaction between medium and computer training.

## 4. There is no area wise difference in attitude towards ICT of computer trained and untrained student teachers.

The hypothesis was tested using Two way Analysis of variance. The following table indicates statistics for Two way ANOVA.

Source of	Sum of	Degree of	Mean of	F ratio	LOS
<mark>vari</mark> ance	squares	freedom	Sum of		
100	(SS)	(DF)	squares		
T.	ns (		(MSS)		
Row	82.71	1	82.71	1.23	NS
(area)	- 12		(2.50)	1000	
1,66	L-K6		vea	1032	
Column	56.7	1	56.7	0.84	NS
Comp.Training)					
Interaction	11.42	1	11.42	0.16	NS
effect					

**Interpretation**: The obtained value of F is less than tabulated value at both the levels i.e 6.70 at 0.01 level and 3.86 at 0.05 level therefore null hypothesis is accepted

There is no significant difference in attitude towards ICT of student teachers of Mumbai and Thane District.

The obtained value of F is less than tabulated value at both the levels i.e 6.70 at 0.01 level and 3.86 at 0.05 level therefore null hypothesis is accepted.

There is no significant difference in attitude towards ICT of student teachers who have taken previous computer training and those who have not taken any previous computer training.

The obtained value of F is less than tabulated value at both the levels i.e 6.70 at 0.01 level and 3.86 at 0.05 level therefore null hypotheses is accepted.

There is no significant difference in attitude towards ICT of student teachers considering the interaction between area and computer training .

5. There is no area wise difference in attitude towards ICT of students teachers of different faculty.

The hypothesis was tested using Two way Analysis of variance. The following table indicates statistics for Two way ANOVA.

Source of	Sum of	Degree of	Mean of	F ratio	LOS
<b>v</b> ariance	squares	freedom	Sum of		
1	(SS)	(DF)	squares		
1	K.Th		(MSS)		
Row	82.71	1	82.71	1.23	NS
(area)	1-1/16	VIEV	VED	1032	
				W 1 1 1 1 1 1 1	
Column	77.97	1	77.97	1.22	NS
( faculty)					
(Taculty)					
Interaction	9.53	1	9.53	0.13	NS
effect					

**Interpretation**: The obtained value of F is less than tabulated value at both the levels i.e 6.70 at 0.01 level and 3.86 at 0.05 level therefore null hypothesis is accepted

There is no significant difference in attitude towards ICT of student teachers of Mumbai and Thane District.

The obtained value of F is less than tabulated value at both the levels i.e 6.70 at 0.01 level and 3.86 at 0.05 level therefore null hypothesis is accepted.

There is no significant difference in attitude towards ICT of student teachers of arts and other than Arts faculty.

The obtained value of F is less than tabulated value at both the levels i.e 6.70 at 0.01 level and 3.86 at 0.05 level therefore null hypotheses is accepted.

There is no significant difference in attitude towards ICT of student teachers considering the interaction between area and faculty.

6. There is no area wise difference in attitude towards ICT of students teachers of different faculty.

The hypothesis was tested using Two way Analysis of variance. The following table indicates statistics for Two way ANOVA.

Source of	Sum of	Degree of	Mean of	F ratio	LOS
variance	squares	freedom	Sum of		
	(SS)	(DF)	squares		
Pec	r-R0	Wiev	(MSS)	103231	erral I
Row	77.97	1	77.97	1.22	NS
(faculty)					
Column	56.7	1	56.7	0.84	NS
( Computer					
training)					
Interaction	5.15	1	5.15	0.07	NS
effect					

**Interpretation**: The obtained value of F is less than tabulated value at both the levels i.e 6.70 at 0.01 level and 3.86 at 0.05 level therefore null hypothesis is accepted

There is no significant difference in attitude towards ICT of student teachers of Arts and other than Arts faculty .

The obtained value of F is less than tabulated value at both the levels i.e 6.70 at 0.01 level and 3.86 at 0.05 level therefore null hypothesis is accepted.

There is no significant difference in attitude towards ICT of student teachers who have taken previous computer training and those who have not taken any previous computer training.

The obtained value of F is less than tabulated value at both the levels i.e 6.70 at 0.01 level and 3.86 at 0.05 level therefore null hypotheses is accepted.

There is no significant difference in attitude towards ICT of student teachers considering the interaction between faculty and Computer training.

## Findings of the study:

On the basis of the analysis the following findings were drawn.

- 1. There is significant difference in attitude towards ICT of student teachers of English and Marathi medium students. Marathi medium students have favorable attitude towards ICT than English medium students.
- 2. There is significant difference in attitude towards ICT of student teachers considering the interaction between medium and faculty.
- 3. There is no significant difference in attitude towards ICT of student teachers considering the interaction between medium and area.
- 4. There is no significant difference in attitude towards ICT of student teachers who have taken previous computer training and those who have not taken any previous computer training.
- 5. There is no significant difference in attitude towards ICT of student teachers considering the interaction between area and computer training.

- 6. There is no significant difference in attitude towards ICT of student teachers of Mumbai and Thane District.
- 7. There is no significant difference in attitude towards ICT of student teachers considering the interaction between area and faculty.
- 8. There is no significant difference in attitude towards ICT of student teachers of Arts and other than Arts faculty.
- 9. There is no significant difference in attitude towards ICT of student teachers considering the interaction between faculty and Computer training.

#### **Discussion:**

The study indicate that there is difference in attitude towards ICT of student teachers of English and Marathi medium students. Marathi medium students have favorable attitude towards ICT than English medium students. The probable reason could be that the Marathi medium students belong to low socio economic status than English medium students. English medium students might have computers at their home where as Marathi medium students might not have computers at their home so whatever opportunities they get in the college to handle computers might have created interest in computer practicals which might helps in developing favorable attitude towards ICT.

### Suggestion:

The following suggestion is proposed on the basis of the study.

- There is need to develop awareness about ICT amongst student teachers to face the challenges in education.
- There is need of computer trained teachers to develop favorable attitude towards ICT.
- Workshops, training programmes of ICT should be organized in colleges of education for teachers and student teachers.

#### **References:**

Dahiya.S (2005) Educational Technology Towards Better Teacher performance, Shipra publication, Delhi.

Jagtap H. N (2004) Advanced Educational Technology and ICT, Nutan publication, Pune.

Parasnis. N.R (1993) Advanced Educational Technology, Nutan publication, Pune.

Prasad, J & Kulkarni, V(1997) Advanced Educational Technology , Kanishka publication,New Delhi.

Yewale.S.M (2004) Educational Technology and ICT, Nutan publication, Pune.

