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# Teacher Trainees' Attitude Towards Information and Communication Technology

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# 1. INTRODUCTION

Kerala is the most literate state in India. As per 2001 census, the effective literacy rate of the state was 90.22% as against 89.81% in 1991. The percentage of women to the total number of teachers significantly increased during the last five decades and reached 68% in 2002-03. It was only 50% in 1976-77. At present there are 12271 schools in Kerala of which 2608 are High Schools. Owing to the timely measurers taken by the Government in improving curriculum, methodology and adoption of new technology in teaching field there is a slight decrease in the drop out rate during the last five years which is an encouraging feature.

Education is accepted to play a key role in achieving community development in the process of globalization through its technological development. This can be achieved by introducing information and communication technology (ICT) in teachinglearning process. For the past three years the Government of Kerala has introduced information technology (IT) as a subject in schools.

The key to successful ICT enabled education is the teacher. With EDUSAT, EDUSERVE (an education server designed to be a one-stop-shop for all web-based academic activities of teachers and students of the schools of Kerala) and a state wide computer grid thousands of teachers across the state can undergo simultaneous training sitting in their own schools. "Once these facilities are in place, teachers training would be revolutionized", says Executive Director of the Project.

The Computer Education plan-Kerala (CEP-K) and the Virtual Class Technology on EduSAT for rural schools (VICTERS) plan were recently unveiled at a press conference by the Education Minister E T Mohammed Basheer. The state government has put in place a blue print for ICT–enabled school education for the next five years. Apart from providing computers and internet connectivity to all government schools, teacher's training and educational content development would also constitute the critical impact areas of ICT-enabled education in the state.

### 2. SIGNIFICANCE OF THE STUDY

As a teacher plays very prominent role in moulding up tomorrow's citizen, the teachers should possess training in using the most modern technologies in the field of education. So the attitude of teacher trainees is very important as it is a tendency which helps them to be favourable or unfavourable towards the usage of most modern technology in the field of education in future when they go for teaching. So it is better as the government has introduced ICT in the syllabus of teacher trainees and has provided opportunity for the teacher trainees to develop power point presentations in the subject which may encourage them to prepare lessons based on multimedia techniques. The introduction of ICT in education will encourage and motivate the

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students to explore new areas of advancement with reference to its latest developments in various subjects.

## 2.1 Objectives

To find out the level of attitude towards ICT of teacher trainees.

## 2.2 Definitions

**Teacher trainees:** They are individuals who are in the process of obtaining a bachelor's degree for qualifying themselves to teach in high schools.

Information and Communication Technology (ICT): It refers to the use of mostly microelectronics in teaching/learning process. It covers information processing of current technologies, computing, telecommunication and applications of microelectronics.

Attitude towards ICT: It is referred as the tendency to react favourable/positive or unfavourable/negative towards ICT.

# 2.3 Hypothesis

- (a) There is no significant difference between male and female teacher trainees in their attitude towards ICT.
- (b) There is no significant association between attitude towards ICT and
- (1) father's educational qualifications
- (2) mother's educational qualifications
- (3) father's occupation
- (4) family income of teacher trainees.

# 2.4 Method of Study

The investigators have adopted the survey method for investigation of the problem. This helps to find out the real conditions, which are prevailing, in the training institution.

# 2.5 Tools Used

Attitude towards ICT scale is developed by the investigators. The dimensions of the scale are enjoyment, anxiety, avoidance/ acceptance, e-mail for classroom learning, negative impact on society and productivity.

### 2.6 Sample

Random sampling technique is used for selecting the sample. The sample consists of 13 male and 18 female teacher trainees covering various optional subjects such as Malayalam, Mathematics, Physical science, Natural science, Social science, and Commerce from the teacher education centre of M G University, Kottayam.

## 2.7 Statistics Used

For analysing the data t-test and chi-square test are used.

## 2.8 Data Analysis

 (a) To determine the level of attitude towards ICT with reference to the sex of teacher trainees

It can be inferred from the above table 1 that 46.2% of male teacher trainees have possessed moderate level of attitude towards ICT, 53.8% of them have high level of attitude towards ICT, and none of them has low level of attitude towards ICT.

Regarding female teacher trainees, 22.2% have moderate level of attitude towards ICT while 78% have high level of attitude towards ICT. None of them has low level of attitude towards ICT.

In total, 68% of the teacher trainees have high level of attitude towards ICT and 32% of them have moderate level of attitude towards ICT.

Table 1. Level of attitude towards ICT with reference to the sex of teacher trainees									
Sex	Low	Moderate	High	Total					
	No	%	No	%	No	%	No	%	
Male	0	0	6	46.2	7	53.8	13	41.9	
Female	0	0	4	22.2	14	77.8	18	58.1	
Total	0	0	10	32.3	21	67.7	31	100	

Table 2. Difference between male and female teacher trainees' attitude towards ICT						
Sex	Count	Mean	Std	t-value	Remarks	
Male	13	141.54	22.73	1.21	N S	
Female	18	150.83	18.83			

Table 3. Association between attitude towards ICT, and father's and mother's educational
qualification, father's occupation and family income

Variables	Degrees of freedom	Calculated X <sup>2</sup>	X <sup>2</sup> value at 5% level of significance	Remarks
Father's educational qualification	8	1.86	15.51	NS
Mother's educational qualification	6	4.31	12.592	NS
Father's occupation	4	3.73	9.488	NS
Family Income	2	1.40	5.99	NS

(b) To find out the difference between male and female teacher trainees in their attitude towards ICT.

It is inferred from table 2 that there is no significant difference between male and female teacher trainees (5% of level of table value of 't' is 1.96). There is no significant difference between male and female teacher trainees in their attitude towards ICT. Since the table value of 't' at 5% level of significance is 1.96, which is higher than the calculated value of 't', which is 1.21, therefore, the null hypothesis is accepted.

 (c) To find out the association between attitude towards ICT and (a) father's educational qualification (b) mother's educational qualification (c) father's occupation (d) family income.

It is inferred from the table 3 that there is no significant association between attitude towards ICT and (a) father's educational qualification (b) mother's educational qualification (c) father's occupation (d) family income.

# 3. FINDINGS

- (a) 54% of male teacher trainees have high level of attitude towards ICT.
- (b) 78% of female teacher trainees have high level of attitude towards ICT.
- (c) 68% of teacher trainees possess high level of attitude towards ICT.

- (d) There is no significant difference between male and female teacher trainees in their attitude towards ICT.
- (e) There is no significant association between attitude towards ICT and (a) father's educational qualification (b) mother's educational qualification (c) father's occupation (d) family income.

# 4. SUGGESTIONS

Based on the above findings and observations we would like to give the following suggestions.

- 1. The teacher trainees should be given opportunities to prepare and use educational slides –still as well as multimedia (including movie, animation, sound, etc.)
- Internet facilities and video conferencing facilities should be extended in all B.Ed colleges so that the teacher trainees can make reference to the best resource materials and interact with their colleagues or educational experts.
- 3. The subject curriculum should be revised by including exposure to various educational software in the field of education.
- Teacher trainees should be given opportunity for power point presentation or multimedia presentation with multimedia projector while doing practice teaching.

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5. Online learning facilities should be extended to all training centres.

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