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ATTITUDE AND KNOWLEDGE OF PRIMARY SCHOOL TEACHERS TOWARDS ICT

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ABSTRACT

Information and Communication Technology (ICT) is an important developmental technique in the recent era which is often associated with the tools varied set of goods, applications and services that are used to produce, store, process, distribute and exchange information. The use of ICTs can make substantial changes for both teaching and learning and preparing the students for techno world. In this twentieth century most of the students of primary school have been given education through smart boards, and also using certain technological device, therefore school teachers must have well-designed technological skills and knowledge for better teaching-learning environment, with the modern teaching tools.

KEY WORD: *ICT, Primary School Teachers.*

TEACHER'S TECHNICAL ACCOUNTABILITY

The future of technology, knowledge, information, and communication, as well as the impact of these components on teaching and learning, may ultimately rest in the hands of educators (Stephen, 1994). Better use of these ICT teaching and learning tools, responsibly and humanely, the teachers need to understand their potential, have opportunities to apply them, be supported in their explorations, and have time to experiment. Equally important, they need to acquire dispositions to recognize and acknowledge ICT as more than a tool for teaching and learning. ICT used as a various purpose such as managerial support, motivational tool and so on in the higher education goal setting. Perhaps the most distinctive new element of teacher preparation curriculum in the last ten years is primary school teachers in the use of computer technology in professional contexts.

RATIONALE OF THE STUDY

The study of the attitude and knowledge towards the ICT in primary school teachers is an important from the view point of modernizing the school education program for enrichment of students learning. Most of the schools have adopted useful measures for the use of ICT in the process of teaching and learning. ICT is being considered as the backbone of the education system in the modern days. Today the students learn through internet based system, submit their assignment on line, holding discussion with the educators and counselors. This underscores the need to improve the ICT contents of primary education system as the teachers may equipped the minimum mastery level about the recent technologies than can be promoted students interest in many subjects.

To create learning joyful teaching and learning environment, in which children are encouraged to discover independent and group work, the adaptation of experience and to prepare children for the information society, the implementation of ICT in education is unavoidable and valuable one. As we live in the world of competition, we need to acquire adequate knowledge about computer and its uses in the field of education. In an information era, the information is knowledge as well as

powerful tool in the education system of any country. It is considered to be the key to success.

Information and Communication Technology has revolutionized education. Today, one cannot be ignorant about the impact of Information and Communication Technologies as primary school teachers should have greater access to ICT as to disseminate the knowledge to all those they come in contact with students learning. This is their primary responsibility, but there is a need to create awareness about the use of Information and Communication ICT, to familiarize the fundamental uses of tools, to acquire knowledge of computer languages and software packages for education, to develop programming skills in computer languages for software packages in education as to develop skills in utilizing Intranet and Internet, and to utilize ICT for solving educational problems, at primary education level. It is necessary and this is the right time to know about the primary school teachers' attitude and knowledge towards the Information and communication technology. Hence, the study is more needful and has much significance in the field of concerned.

OBJECTIVES OF THE STUDY

- To find out the primary school teachers level of attitude towards ICT.
- To find out the primary school teachers level of knowledge towards ICT.
- To find out the significant difference of primary school teachers attitude and knowledge towards ICT based on

a. Technical Knowledge
b. Gender
c. Educational Qualification
d. Type of Management
e. Technical Knowledge

- To find out the relationship between attitude and knowledge towards ICT of primary school teachers.

HYPOTHESES

1. There is no significant difference in attitude and knowledge towards ICT among primary school teachers based on

a. Age
b. Gender
c. Educational Qualification
d. Type of Management
e. Technical knowledge

2. There is no significant relationship between attitude and knowledge towards ICT among primary school teachers.

METHODOLOGY

Normative survey method was used. The population for this study comprised of primary school teachers from government, govt. aided and private schools. A sample of 200 primary school teachers of Chennai district was selected randomly.

TOOLS

Self-constructed tools were used to collect data from primary school teachers in this study. The tools namely:

Attitude towards ICT Scale

Attitude towards ICT scale is a five-point scale with 30 statements. Primary school teachers were requested to give responses based on their preferences against five options given namely, (1) Strongly

accepted (2) Accepted (3) Neutral (4) Strongly disagree, and (5) Disagree. The tool consists of 30 statements among them 12 statements are negatively framed and 18 statements are positive.

Questionnaire on Knowledge about ICT

Questionnaire on knowledge about ICT is a two-point scale with 14 statements. Primary school teachers were requested to give responses based on their preferences against two options given namely, (1) Yes, and (2) No. The tool consists of 14 statements among them all 14 statements are positive and there were no negative statements.

DATA ANALYSIS

Table 1: Level of Attitude towards ICT of Primary School Teachers

	Level	Frequency	Percentage
Attitude towards ICT	Low	0-98.20	16.5
	Moderate	98.21-123.92	68
	High	123.93 and above	15.5

Table 2: Level of Knowledge about ICT of Primary School Teachers

	Level	Frequency	Percentage
Knowledge about ICT	Low	0-6.23	26
	Moderate	6.24-12.71	58
	High	12.72 and above	16

Table 3: Attitude towards ICT and Knowledge about ICT of Primary School Teachers based on Age

Variable	Source of Variance	Sum of Squares	df	Mean Square	F	Level of Significance
Attitude towards ICT	Between Groups	1606.787	2	753.393	4.720	0.010*
	Within Groups	41443.368	197	159.611		
	Total	42950.155	199			
Knowledge about ICT	Between Groups	138.516	2	69.258	6.977	0.001*
	Within Groups	1955.404	197	9.926		
	Total	2093.920	199			

**Significant at 0.01 level.*

Table-3 shows that the calculated F-value 4.720 is significant at 0.05 level. Thus there is significant difference in attitude towards ICT among primary school teachers. It can be understand that age have strong influence on ICT.

From Table-3, the calculated F-value 6.977 is significant at 0.05 level. Thus there is significant difference in knowledge about ICT among primary school teachers. It can be understand that age have strong influence on ICT.

Table 4: Attitude towards ICT and Knowledge about the ICT based on Gender

Variable	Male		Female		t-value	Level of significance
	Mean	SD	Mean	SD		
Attitude towards ICT	116.04	7.898	110.35	13.293	2.084**	Significant

Knowledge about ICT	118.09	9.280	113.47	12.248	3.066*	Significant

**Significant at 0.05 level & **Significant at 0.01 level.*

Table-4 depicts that the calculated t-value 2.084 is higher than the table value 1.96 at 0.05 level of significance. Thus there is significant difference between male and female primary school teachers in their attitude towards ICT.

From Table-4, the calculated t-value 3.066 is higher than the table value 2.58 at 0.01 level of significance. Thus there is significant difference between male and female primary school teachers in their knowledge about ICT.

Table 5: Attitude towards ICT and Knowledge about ICT based on Educational Qualification

Variable	UG		PG		t-value	Level of significance
	Mean	SD	Mean	SD		
Attitude towards ICT	110.63	12.751	116.62	13.481	3.580*	Significant
Knowledge about ICT	9.42	3.237	119.83	15.317	3.623*	Significant

**Significant at 0.01 level.*

From Table-5, that the calculated t-values 3.580 and 3.623 are significant at 0.01 level. Thus there is significant difference between UG and PG qualified teachers in their attitude towards ICT and knowledge about ICT.

Table 6: F-value of Attitude and Knowledge towards ICT with Respect to School Management

Variable	Source of Variance	Sum of Square	Df	Mean Square	F	Level of significance
Attitude towards ICT	Between Groups	1144.315	2	572.158	3.544	.031*
	Within Groups	31805.840	197	161.451		
	Total	32950.155	199			
Knowledge about ICT	Between Groups	117.962	2	58.981	5.880	.003*
	Within Groups	1975.958	197	10.030		
	Total	2093.920	199			

**Significant at 0.01 level.*

Table-6 depicts that the calculated F-value 3.544 is higher than the table value at 0.01 level of significance. Thus there is significant difference in attitude towards ICT among primary school teachers based on school management.

From Table-6, the calculated F-value 5.880 is higher than the table value at 0.01 level of significance. Thus there is significant difference in knowledge about ICT among primary school teachers based on school management.

Table 7: Mean, Standard Deviation and t-value were calculated for the Scores on Attitude towards ICT and Knowledge about the ICT with Respect to technical knowledge

Variable	Yes		No		t-value	Level of Significance
	Mean	SD	Mean	SD		
Attitude towards ICT	110.90	13.407	109.83	8.106	0.076	Not Significant
Knowledge about the ICT	111.09	6.091	98.73	9.215	2.621*	Significant

**Significant at 0.01 level.*

Table-7 shows that the calculated t-value 0.076 is 0.076 not significant at 0.05 level. Thus there is no significant difference in attitude towards ICT among primary school teachers based on the marital stage.

From Table-7, the calculated t-value 2.621 is significant at .01 level. Thus there is significant difference in knowledge about ICT among primary school teachers based on the marital stage.

Table 8: Relationship between Attitude towards ICT and Knowledge about ICT among Primary School Teachers

Variables		Attitude towards ICT	Knowledge about the ICT
Attitude towards ICT	Pearson Correlation	1	.336**
	Sig. (2-tailed)		.000
	N	200	200
Knowledge about ICT	Pearson Correlation	.336**	1
	Sig. (2-tailed)	.000	
	N	200	200
**Correlation is significant at the 0.01 level (2-tailed).			

Table-8 reveals that there is positive strong relationship between attitude towards ICT and knowledge about ICT among primary school teachers.

EDUCATIONAL IMPLICATIONS

The inculcation of the ICTs into education is the vital in the development of any nations, particularly developing countries. It allows nations to be achieving development goals by speeding up the teaching learning process by enhancing the attitude and knowledge of the pre-service and in-service teacher training program so that it will be much useful for the teachers to handle their class effectively. Information and Communication Technologies are widely recognized that modern education should aim to create relevant insight to nurture and development of useful skills among teachers. ICT can help to reach the unreachable in the educational process. The pre-service training is the most suitable period to arrive at a clear picture of tomorrow's teachers ICT skills, as identified gaps can be filled either during the rest of the training program or through a need based in-service training program after they enter to the profession. Hence the focus of the present study is on the attitude towards ICT and knowledge about the ICT among primary teachers.

The study of attitude towards ICT and knowledge about the ICT among primary school teachers is an important future in the field of education to bring desire skills on ICT. Based on this study there are more steps to be taken up to enhance the primary school teacher's ICT skills as to enhance professional competency.

CONCLUSION

The present day education system working with the support recent information and communication technology and the integration of ICT in education plays a crucial role in effective teaching and learning process. Hence, the inculcation of ICT in education has to be adopted in the in-service teacher training program so as the teacher will get wide knowledge on the innovative techniques in education. The present study is aimed to know the primary school teachers' attitude towards ICT and knowledge about the ICT. The result of the present study reveals that age factor of the primary school teachers has significant influence on their attitude and knowledge about the ICT. Similarly, school management has specific role in the the primary school teachers' attitude and knowledge about the ICT. Educational qualification of the primary school teachers do not have any significant role on their attitude and knowledge about the ICT.

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