Information Communication Technology Still Need For Teacher Educators

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Abstract

This present investigation is carried out to find the ICT need (**Information Communication Technology Need)** of the teacher educators. 100 respondents from 12 Education Colleges in Cuddalore District of Tamilnadu was randomly selected. **ICT need assessment scale** (2017) developed and standardize by the researcher is used to collect data. The collected data were analysed with the help of SPSS IBM19 and results were interpreted. Most of the teacher educators ICT Need is moderate. Experience and gender show significant relationship with ICT need score of the teacher educators. Gender, Subject handling and Experience show positive significant correlation but Marital status shows negative significant correlation with ICT need of the teacher educators. **The Subject handling, Gender were relatively strong indicators of ICT Need, and marital status was a moderate indicator of ICT Need.** The prediction model contained three of the ten predictors and was reached in three steps with **7** variables removed. The model was statistically significant, ***F* (3, 96) =12.607,*p* < .001, and accounted for approximately 28 %** of the variance of ICT Need (R2=0.283 AdjustedbR2=0.26).

Key words: *ICT need, Teacher Educators*

INTRODUCTION

ICT need of the teacher educator decides the ICT competency of the student teachers. The prospective student teachers are going to handle 21st century students. They are born with ICT and techno friendly. Those students can accesses world of knowledge with technology at anytime and anywhere. Their learning environment is entirely different from past decades. Teachers are forced to learn technology and introduce themselves to the 21st era education environment. They must acquire much faster than their students and use those learned technology in their class rooms. Few teachers are keeping away from technology and unaware of current learning environment. Today, from the time we awaken in the morning to the time before we sleep, we are surrounded by media, such as newspapers, radio, television, and computers. Sometimes we are not even aware that we are surrounded by these media. All these media come under the overall umbrella of what are known as today's ICTs. Knowing and using ICTs is important in today's fast changing knowledge society, but we very often are confused about what these media are.

ICT NEEDS ANALYSIS

ICT Needs Analysis is the collection of data to find out where there are gaps in the existing skills and knowledge of individual Teacher educators. A successful ICT Needs Analysis can result in people being more productive and happier in their roles. The ICT Needs Analysis process will also help identify skills that already exist within the organization ICT Needs Analysis can often help to identify where there might be significant gaps in the knowledge or skills of the organization as a whole**.**

NEED FOR THE STUDY

Student teachers are more advanced in usage of technology then teacher Educators. Our students are easily exposed to technology and learn its usage and operation. There is a gap exist between teacher Educators's technical competency and student's technical competency. There is shift from teaching to learning in the minds of educators and learners. The application of ICT knowledge will make this process very easy for the both educators and learners. The Teacher educators are equipped with ICT knowledge will transfer the same to their student teacher during their course of study itself. **The Teacher educators are training forces of perspective teacher**. **So the researcher wants to find out the ICT needs of the teacher educators.**

SIGNIFICANCE OF THE STUDY

The ICT need score explore the weakened areas in ICT competency like computer Operation skill, Word processing skill, Power Point Presentation skill and Internet usage skill. This gives an idea for the educational administrator and policy makers about the current scenario. **This ICT need analysis helps to develop refresher courses based on need of the teacher educators and helps to develop specific objectives of the training program**.

STATEMENT OF THE PROBLEM

The problem taken up for the present study by the investigator may be stated as **"The study on ICT need analysis of teacher educators"**

OPERATIONAL DEFINITION

1. **ICT Need:** The deficiency found among the teacher educators in ICT related knowledge and skill.

2. **Teacher Educators:** Those who are teaching in education colleges for student teachers**.**

OBJECTIVES OF THE STUDY

1. To assess the level of ICT need of teacher educators.
2. To find significant difference in ICT need of teacher Educators and their subsamples.
3. To observe the correlates of ICT need of teacher Educators.
4. To discover the predictors of ICT need of teacher Educators.

HYPOTHESES OF THE STUDY

1. The teacher educator ICT need is low.
2. There is no significant difference in ICT need of teacher Educators and their subsamples.

3. There is no significant correlates of ICT need of teacher Educators.
4. There is no significant predictors of ICT need of teacher Educators.

LOCATION OF THE STUDY

The locale of the present study is colleges of education which are affiliated by Tamilnadu Teachers Education University, Chennai in Tamilnadu. There are totally 731 colleges Affiliated to this University including government, government-aided and self-financing colleges. Numbers of Education Colleges in Cuddalore District is 30. The present investigation was conducted in the teacher educators working in education Colleges situated in Cuddalore district.

RESEARCH METHODS

Normative survey method is used in the present study. It seeks to obtain precise information concerning the existing status of phenomena and to draw valid general conclusions from the facts revealed. This study is not restricted only to fact findings but in formulation of important principal knowledge and solution of significant problem related to ICT need of the Teacher Educators and other significant variables related to it.

SAMPLE OF THE STUDY

Education colleges were randomly selected from 30 Education colleges in Cuddalore district for the present study. In Cuddalore district all the Education colleges are comes under self-financing nature. The respondents were randomly chosen from the randomly chosen twelve teacher educational institutions in Cuddalore district.

DISTRIBUTION OF THE SAMPLE

The random sampling method was used to select the samples. The sample was divided into different categories on the basis of the gender, qualification, subject, subject handling, experience, monthly income, medium of institution, age, marital status, location.

SAMPLE SIZE

100 samples were selected randomly from 12 Education Institutions. In these 100 samples 33 male teacher educators and 67 female teacher educators are collected.

RESEARCH TOOL

ICT need assessment scale (2017) developed and standardize by the researcher is used to collect data. The tool contains 50 items in five point scale with four dimensions as computer Operation skill, Word processing skill, Power Point Presentation skill and Internet usage skill. The reliability and validity of the scale is **0.93** and **0.96** respectively

STATISTICAL TECHNIQUES

The following statistical techniques were used for analysis and interpretation of data Descriptive analysis

a. Measure of central tendency (Mean).

b. Measure of Variability (Standard Deviation).

c. Inferential Analysis 't' test & 'F' test

d. Multiple Correlation and Regression Analysis

ANALYSIS OF THE LEVEL OF ICT NEED OF TEACHER EDUCATORS

Collected data were analysed with **SPSS IBM19** and tabulated for interpretations of results

. **Table-1. Percentage analysis of ICT Need score of the total sample**			
S.No	**ICT NEED**	**Score**	**Percentage**
1	Very Low	0-50	1
2	Low	51-100	11
3	Moderate	101-150	64
4	High	151-200	24
5	Very high	201-250	0

From the above **table-1** it is found that 1% and 11% of respondents require low and very low ICT Need, 24% of respondents require high level of ICT Need and 64% of the respondents require moderate level of ICT Need. **So most of the teacher educators require moderate level of ICT Need.**

Table-2 Mean and Standard Deviation of ICT Need of Teacher Educators				
S.No	Variable	N	Mean	SD
1	**ICT Need**	**100**	**125.85**	**28.16**

The above **table -2** shows the mean score and standard deviation of ICT Need of teacher educators are found to be **125.85** and **28.16** respectively. **It is concluded that the Teacher Educators ICT Need is Moderate (101-150).**

Table- 3. *t*- Test Showing Relationship between Personal variables and ICT Need Score of Teacher Educators.							
S.No	**Variables**		**N**	**Mean**	**SD**	***t-value***	**Result**
1	**Gender**	Male	33	110.88	35.74	-3.34	S
		Female	67	133.22	20.07		
2	**Subject Handling**	Optional	23	106.52	31.13	-4.03	NS
		Core	77	131.62	24.61		
3	**Income**	Below 25	62	124.47	28.80	-.63	NS

		Above 25	38	128.11	27.32		
4	**Age**	Below 30	47	121.60	30.43	-1.43	NS
		Above 30	53	129.62	25.69		
5	**Marital Status**	Married	69	131.03	24.28	2.84	NS
		Unmarried	31	114.32	32.89		
6	**Locality**	Rural	63	124.54	29.39	-.61	NS
		Urban	37	128.08	26.17		

It is inferred from the above **Table-3** obtained t-value there is a significant difference in male and female teacher educator's ICT need score. Since the calculated t-value (-3.34) is significant at 5% level. Therefore the stated null hypothesis is rejected and alternate hypothesis is accepted. **Therefore it is concluded that the male and female respondent differ in their ICT need score.**

It is inferred from the obtained t-value there is no significant difference in option and core subject teaching teacher educator's ICT need score. Since the calculated t-value (-4.03) is not significant at 5% level. Therefore the stated null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the option and core subject teaching respondent do not differ in their ICT need score.**

It is inferred from the obtained t-value there is no significant difference in ICT need score of teacher educator's income group below Rs: 25,000/- and above Rs: 25,000/-. Since the calculated t-value (-.63) is not significant at 5% level. Therefore the stated null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the below Rs: 25,000/- and above Rs: 25,000/- earning respondent do not differ in their ICT need score.**

It is inferred from the obtained t-value there is no significant difference in ICT need score of teacher educator's with age group below 30 years and above 30 years. Since the calculated t-value (-1.43) is not significant at 5% level. Therefore the stated null hypothesis is accepted and alternate hypothesis is rejected. **The respondents in the age group below 30 years and above 30 years do not differ in their ICT need score.**

It is inferred from the obtained **t-value** there is no significant difference in married and unmarried teacher educator's ICT need score. Since the calculated t-value (2.84) is not significant at 5% level. Therefore the stated null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the married and unmarried respondent do not differ in their ICT need score.**

It is inferred from the obtained **t-value** there is no significant difference in rural and urban teacher educator's ICT need score. Since the calculated t-value (-.61) is not significant at 5% level. Therefore the stated null hypothesis is accepted and

alternate hypothesis is rejected. **Therefore it is concluded that the rural and urban respondent do not differ in their ICT need score.**

Table- 4. *f*- Test Showing Relationship between Personal variables and ICT Need Score of Teacher Educators.

S.No	Variables		N	Mean	SD	*f-value*	Result
7	**Qualification**	MEd	59	122.25	29.21	2.01	NS
		MPhill	39	129.77	25.60		
		PhD	2	155.50	31.82		
8	**Subject**	Arts	45	119.44	28.23	2.83	NS
		Commerce	10	122.20	30.18		
		Science	45	52.24	13.81		
9	**Experience**	Below One Year	48	118.50	30.31	3.29	S
		2-5year	40	132.83	24.28		
		Above5year	12	132.00	25.81		

It is inferred from the obtained **f-value** there is no significant difference in different qualified teacher educator in their ICT need score. Since calculated f-value (2.01) is not significant at 5% level. Therefore stated null hypothesis is accepted. **Therefore the teachers with different qualification do not differ in their ICT need score.**

It is inferred from the obtained **f-value** there is no significant difference in different subject handler in their ICT need score. Since calculated f-value (2.83) is not significant at 5% level. Therefore stated null hypothesis is accepted. **Therefore the teachers with different subject handling do not differ in their ICT need score.**

It is inferred from the obtained **f-value** there is a significant difference in different experienced teacher educator in their ICT need score. Since calculated f-value (3.29) is significant at 5% level. Therefore stated alternate hypothesis is accepted. **Therefore the teachers with different experience differ in their ICT need score.**

Table: 5. Multiple Correlation Analysis

S.NO	Variables	r	Result
1	**Gender**	**0.38****	**S**

2	**Qualification**	0.18	**NS**
3	**Major Subject**	0.14	**NS**
4	**Subject Handling**	**0.38****	**S**
5	**Experience**	**0.22***	**S**
6	**Income**	0.06	**NS**
7	**Age**	0.14	**NS**
8	**Marital Status**	**-0.28****	**S**
9	**Location**	0.06	**NS**
** -significant at 1% level. *-significant at 5% level.			

The above **table-5** show the coefficient of correlation between Gender, Qualification , Major Subject, Subject Handling, Experience, Income , Age , Marital Status , Location and ICT need score is **0.38**,** 0.18, 0.14, **0.38**, 0.22*,** 0.06, 0.14, **-0.28**** and 0.06. Hence it is found that Gender, Subject handling and experience show positive significant correlation but marital status shows negative correlation with ICT need of teacher educators.

Table- 6.

STEPWISE REGRESSION BETWEEN ICT NEED AND OTHER VARIABLES

Model	**B**	**Std. Error**	**Beta**	**Pearson r**	**Sr^2**	**Structure Coefficient**
(Constant)	72.50	16.056				
Subject Handling	21.55	5.814	.324	.377	0.102	0.709
Gender	17.65	5.308	.296	.375	0.082	0.705
Marital Status	-10.89	5.382	-.180	-.276	0.030	0.519

Note: The dependent variable is **ICT Need**. **R2=0.283** Adjusted **R2=0.26**

Sr^2 is squared semi-partial correlation. * $p < .05$

Table 6 shows gender, Main subject, Subject handled, Experience, Income, Age, Marital Status, Locality and ICT Need were used in a stepwise multiple regression analysis to predict ICT Need of the Teacher educators. The correlation of variables is

shown in table.4. As can be seen correlations with Gender, Subject handling, Experience, Marital status and ICT Need were statistically significant.

The prediction model contained three of the nine predictors and was reached in three steps with **6** variables removed. The model was statistically significant, ***F* (3, 96) =12.607,*p* < .001, and accounted for approximately 28 %** of the variance of ICT Need (R2=0.283 AdjustedbR2=0.26). ICT Need is primarily predicted by the lower levels of marital status, and to the lesser extent by the higher levels of gender and Subject handling. The raw and standardized regression coefficient of predictors together with their correlation with ICT Need, their squared semi-partial correlations, and their structure coefficients are shown in table-5 The Subject handling received the strongest weight in model followed by Gender and Marital status. Marital status received the lowest weight of the three weights. With the sizeable correlations between the predictors, the unique variance explained by each of the variables indexed by the squared semi-partial correlation was relatively low: The **Subject handling, Gender and Marital status** uniquely accounted for approximately **10%, 8%, and 3%** of the ICT Need. Inspection of the structure coefficient suggests that **the Subject handling, Gender were relatively strong indicators of ICT Need, and marital status was a moderate indicator of ICT Need.**

MAJOR FINDINGS

- It is concluded that the teacher Educators ICT Need is Moderate (101-150).
- The male and female teacher educators differ in their ICT need score.
- The respondents in the income group below Rs:25,000/- and above Rs:25,000 /- teacher educators do not differ in their ICT need score.
- The respondents in the age group below 30years and above 30 years teacher educators do not differ in their ICT need score.
- The married and unmarried teacher educators do not differ in their ICT need score.
- The rural and urban teacher educators do not differ in their ICT need score.
- The teachers with different qualification do not differ in their ICT need score.
- The teachers with different subject do not differ in their ICT need score.
- The teachers with different experience differ in their ICT need score.
- correlation
- The Subject handling, Gender were relatively strong indicators of ICT Need, and marital status was a moderate indicator of ICT Need.

CONCLUSION

Teacher educators in Cuddalore district are require moderate level of ICT NEED. Female teacher educators, handling Core Subjects, having above 20 years of age, getting above Rs.25000/- as salary, living in urban, with Ph.D.

qualification, Studied Commerce as major subject and having more than five years of experience are having more ICT Need than others. So the teacher educators should be given **ICT Training as orientation by the university and Administrators of Teacher education colleges**. The ICT Training objectives should be based on the current requirements of the teacher educators. The quality of teacher education decides the quality of student teachers. It is essential to implement necessary measures to improve the ICT skills of the teacher educators. So Educational College administrators should give training in following skills to their teacher educators.

- Computer Operation Skill,
- Word Processing Skill,
- Power Point Presentation Skill
- Internet Usage Skill
- E- Communication skills
- Document handling skills
- Storage and recovery skills
- Protection of information skills
- Knowledge about internet service providers
- Protection of school campus from unwanted websites.

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