A Study On Information And Communication Technology Awareness Among B.Ed. Trainees In Colleges Of Education In Pudukkottai District

Abstract

Indian Education Commission holds (1964-1966), “Education serves as a powerful instrument of social, economic & cultural transformation necessary for the realization of the national goals”. Nowadays ICT is vastly used in the field of education. ICT creates the teachers’ teaching more effectively and enhances students’ learning interest and their potentials and abilities. Teachers without the knowledge and skills of ICT cannot present and deliver the subject matter to switch on the students in a clear manner. It is more helpful to the teachers and the students. And also ICT is one of the sources of learning unavoidably in the present situation. As per the Government Vision of Inclusion of ICT facilities in school it is teacher’s responsibility to the well versed in ICT knowledge. To be well versed in ICT the teacher training institute should provide adequate ICT facilities and computer education to the future teachers. Our objectives of this study were known and understood in thorough ICT awareness of B.Ed. trainees in colleges of education in Pudukkottai District. By this term ICT Awareness the investigator means how B.Ed. trainees in colleges of education see and observe the value system with the help of ICT. It implies that values are not simply and evenly distributed but are personalized by judging things, qualities, events, or actions from a personal point of view. Thus our research will suggest the expressive exploration, through the analysis of ICT awareness of B.Ed. trainees in colleges of education in Pudukkottai district. Finally, the author has calculated the average of B.Ed. trainees’ awareness on ICT with regard to B.Ed. trainees’ locality and gender through ICT Awareness scale. This will help to provide more accuracy to the results. In the present study, one government B.Ed. college and fourteen self-finance B.Ed. colleges were recognized by the Directorate Of Higher Education and affiliated the Tamil Nadu Teachers Education University under taken by the
The state government of Tamil Nadu have been chosen. The sample of the present study consists of 900 B.Ed. trainees. Among them, 450 are male and 450 are female. The normative survey method is followed to collect the data. The data was quantified and analysed in the term of t-test and percentage.

1. INTRODUCTION

Indian Education Commission holds (1964-1966), “Education serves as a powerful instrument of social, economic & cultural transformation necessary for the realization of the national goals”. Information and Communication Technology is defined as the use of hardware and software for efficient management of information. i.e. storage, retrieval, processing, communication, diffusion and sharing of information for social, economic and cultural upliftment. The UNESCO defines information and communication technology (ICT) as “scientific, technological and engineering disciplines and the management technique used in information handling and processing, their application, computers and their interaction with men and machines, and associated with social, economic and cultural matter”.

Nowadays ICT is vastly used in the field of education. ICT creates the teachers’ teaching more effectively and enhances students’ learning interest and their potentials and abilities. Teachers without the knowledge and skills of ICT cannot present and deliver the subject matter to switch on the students in a clear manner. It is more helpful to the teachers and the students. And also ICT is one of the sources of learning unavoidably in the present situation.

2. NEED AND IMPORTANCE OF THE STUDY

Inclusion of ICT in the existing B.Ed. curriculum is very important and its effective integration into the main stream is absolutely essential. Teachers are being challenged to integrate ICT’s in to the curriculum and to facilitate new forms of teaching and learning. It is very difficult for them to accept this responsibility before mastering basic computer literacy skills and demonstrating a high degree of confidence in the general use of ICTs. As per the government vision of inclusion of ICT facilities in school it is teacher’s responsibility to be well versed in ICT knowledge. To be well versed in ICT the teacher training institute should provide adequate ICT facilities and computer education to the future teacher. In the content, there is a need to study some aspects of ICT in the colleges of education. The present investigation fulfills the research gap of the study.

3. OBJECTIVES OF THE STUDY

The objectives of a research project are to summarize what is to be achieved by the study. These objectives should be closely related to the research problem.

(I) General Objectives Of The Study

a. To know the ICT awareness of B.Ed. trainees in colleges of education in Pudukkottai district.
b. To understand the ICT awareness of B.Ed trainees in colleges of education in Pudukkottai district.

(II) Specific Objectives Of The Study
a. To identify the knowledge among the B.Ed. trainees in college of education in different areas of ICT aspects.
b. To find out the awareness on ICT of B.Ed. trainees in college of education in Pudukkottai district.
c. To find out the difference between the rural boys and rural girls B.Ed. trainees in college of education with regard to awareness on ICT.
d. To find out the difference between the rural boys and urban boys B.Ed. trainees in college of education with regard to awareness on ICT.
e. To find out the difference between the rural boys and urban girls B.Ed. trainees in college of education with regard to awareness on ICT.
f. To find out the difference between the rural girls boys and urban boys B.Ed. trainees in college of education with regard to awareness on ICT.
g. To find out the difference between the rural girls and urban girls B.Ed. trainees in college of education with regard to awareness on ICT.
h. To find out the difference between the urban boys and urban girls B.Ed. trainees in college of education with regard to awareness on ICT.

4. STATEMENT OF THE PROBLEM
ICT awareness involves knowing about the existence and importance of the ICT tools and their application. Potential ICT users should be enriched with a number of ICT awareness programmes in order to increase the usage of ICT facilities. This can be achieved through promotional programmes which include electronic media resources such as radio, TV and website; print media such as newspapers, magazines, newsletters and notice boards and organization of workshops, seminars, conferences and public lectures. ICT awareness can also be created through the inclusion of ICT courses into B.Ed. trainees in colleges of education in Pudukkottai district.

5. OPERATIONAL DEFINITIONS
i. Study
By the term ‘study’ the investigator means an attempt to gain knowledge from relevant materials.

ii. ICT
Information and communication technology (ICT) as “scientific, technological and engineering disciplines and the management technique used in information handling and processing, their application, computers and their interaction with men and machines, and associated with social, economic and cultural matter.

iii. ICT Awareness
By this term the investigator means how B.Ed. trainees in colleges of education see and observe the value system of help of ICT. It implies that values are not simply and evenly distributed but are personalized by judging things, qualities, events, or actions from a personal point of view.

iv. **B.Ed. Trainees**  
The trainees who are pursuing bachelor degree course of study in education in the colleges of education are designated as “B.Ed. college students”.

v. **Pudukkottai District**  
Pudukkottai district is one of the revenue district of Tamil Nadu State.

### 5. HYPOTHESES OF THE STUDY
The following hypotheses have been formulated on the basis of the objectives of the present study.

i.) The B.Ed trainees in college of education have no awareness about ICT  
ii.) There is no significant difference between the rural boys and rural girls B.Ed trainees in college of education with regard to awareness on ICT.  
iii.) There is no significant difference between the rural boys and urban boys B.Ed trainees in college of education with regard to awareness on ICT.  
iv.) There is no significant difference between the rural boys and urban girls B.Ed trainees in college of education with regard to awareness on ICT.  
v.) There is no significant difference between the rural girls and urban boys B.Ed trainees in college of education with regard to awareness on ICT.  
vi.) There is no significant difference between the rural girls and urban girls B.Ed trainees in college of education with regard to awareness on ICT.  
vii.) There is no significant difference between the urban boys and urban girls B.Ed trainees in college of education with regard to awareness on ICT.

### 6. VARIABLES OF THE STUDY
a. **Primary variable**  
Awareness on ICT

b. **Secondary variable**  
B.Ed. trainees in college of education

c. **Moderate variables**  
i.) Locality of B.Ed. trainees like rural and urban areas  
ii.) The gender of the trainees are boys and girls

### 7. SAMPLING OF THE STUDY
The sample of the present study consists of 900 B.Ed. trainees. Among them 450 are male and 450 are female. Sample is a small proportion of a population selected for observation and analysis. In this study the sample consists of 900 B.Ed. trainees in colleges of education in Pudukkottai district”. It is shown in the table below.
Table 1: B.Ed. College-Wise Distribution Of The Sample

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Name of the B.Ed College</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Sri Manickam College of Education-Sivapuram.</td>
<td>50</td>
</tr>
<tr>
<td>2.</td>
<td>J.J.College of Education- Sivapuram</td>
<td>75</td>
</tr>
<tr>
<td>3.</td>
<td>Auxilium College of Education-Ragunathapuram</td>
<td>75</td>
</tr>
<tr>
<td>4.</td>
<td>B.T.K B.Ed College of Education-Viralimalai</td>
<td>50</td>
</tr>
<tr>
<td>5.</td>
<td>J.K College of Education-Kunnakurambi</td>
<td>50</td>
</tr>
<tr>
<td>6.</td>
<td>Mahatma College of Education, Ariyur</td>
<td>75</td>
</tr>
<tr>
<td>7.</td>
<td>S.V.S College of Education- Pudukkottai.</td>
<td>50</td>
</tr>
<tr>
<td>8.</td>
<td>Sri Bharathi College of Education- Kaikurichi.</td>
<td>50</td>
</tr>
<tr>
<td>9.</td>
<td>Government College of Education- Pudukkottai.</td>
<td>100</td>
</tr>
<tr>
<td>10.</td>
<td>Sri Bharathi Vidhyalaya College of Education-Thirugokarnam</td>
<td>75</td>
</tr>
<tr>
<td>11.</td>
<td>Keerai Thamil Selvan College of Education for Women - KTS Nagar.</td>
<td>50</td>
</tr>
<tr>
<td>12.</td>
<td>Naina Mohamed College of Education-Rajendrapuram</td>
<td>50</td>
</tr>
<tr>
<td>13.</td>
<td>St.Xaviers College of Education-Venkatakulam</td>
<td>50</td>
</tr>
<tr>
<td>14.</td>
<td>Sudharsan College of Education-Perumanadu</td>
<td>50</td>
</tr>
<tr>
<td>15.</td>
<td>Sasthaa College of Education-Kilanilaikottai</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td><strong>Total Sample</strong></td>
<td><strong>900</strong></td>
</tr>
</tbody>
</table>

i.) **Tool Used For The Study**

For the present study, the investigator studied some of the available tools and found that the ICT Awareness scale developed by Dr. Prabhakati Devi, Y. (2004) for his doctoral study, is suitable for the present investigation. The investigator in consultation with the guide modified the tool to suit his study and prepared the ICT Awareness scale.

ii.) **Data Collection**

The normative survey method is followed to collect the data. These data are collected from Government and Self- Finance B.Ed Colleges only and not from the Government Aided B.Ed College in Pudukkottai District. The researcher could select the face to face survey method (Direct Survey) in this study because he wanted to avoid the non-statistical errors.

iii.) **Statistical Techniques**

The data was quantified and analysed in the term of t-test and percentage.

8. **DELIMITATION OF THE STUDY**

i.) The study is explained with the following delimitations.

ii.) The study was limited to B.Ed. trainees in college of education only.

iii.) The study was restricted to a sample chosen from Pudukkottai district only.

iv.) The study was restricted only to Government and self-finance B.Ed. trainees in college of education.

v.) Sample size was restricted to 900 B.Ed. trainees only.

vi.) Data were collected by the researcher through survey method only.
vii.) Direct survey adapted.
viii.) Questionnaire on ICT awareness was used to collect the data.
ix.) ‘t’ test and Percentage were adapted in this research.

9. ANALYSIS AND INTERPRETATION OF THE STUDY

I. Awareness Of ICT Among B.Ed. Trainees

In order to find out the level of Awareness of ICT among B.Ed. trainees in colleges of education percentage was calculated.

Table 2: Awareness Of ICT Among B.Ed. Trainees

<table>
<thead>
<tr>
<th>No. of Respondents</th>
<th>Level of Awareness</th>
<th>Percentage of Awareness</th>
</tr>
</thead>
<tbody>
<tr>
<td>90</td>
<td>Low</td>
<td>10%</td>
</tr>
<tr>
<td>810</td>
<td>High</td>
<td>90%</td>
</tr>
</tbody>
</table>

The calculated percentage of the respondents was 10% at low level and 90% at high level. Hence the formulated hypothesis ICT among B.Ed. trainees possess awareness on ICT is accepted.

Figure 1: Graphical representation of level of awareness on ICT
II. Awareness On ICT For Urban Boys, Rural Boys, Rural Girls And Urban Girls B.Ed Trainees

Table 2: Awareness On ICT

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Variable</th>
<th>No.</th>
<th>Mean</th>
<th>SE</th>
<th>Between</th>
<th>t-Value</th>
<th>Significance at 0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rural Boys</td>
<td>225</td>
<td>68.72</td>
<td>12.538</td>
<td>1&amp;2</td>
<td>0.2776</td>
<td>No Significance</td>
</tr>
<tr>
<td>2</td>
<td>Rural Girls</td>
<td>225</td>
<td>69.30</td>
<td>12.935</td>
<td>1&amp;3</td>
<td>3.7520</td>
<td>Significance</td>
</tr>
<tr>
<td>3</td>
<td>Urban Boys</td>
<td>225</td>
<td>76.17</td>
<td>13.617</td>
<td>1&amp;4</td>
<td>4.1410</td>
<td>Significance</td>
</tr>
<tr>
<td>4</td>
<td>Urban Girls</td>
<td>225</td>
<td>77.37</td>
<td>12.829</td>
<td>2&amp;3</td>
<td>3.1068</td>
<td>Significance</td>
</tr>
</tbody>
</table>

Significance at 0.05 Levels

i. The calculated ‘t’ value between the rural boys and rural girls is 0.2776 which is less than the theoretical ‘t’ vale at 0.05 level (1.96). So there is no significant difference between the rural boys and rural girls B.Ed. trainees with regard to awareness on ICT is accepted that means rural boys and rural girls B.Ed. trainees with regard to awareness on ICT is more or less same.

ii. The calculated ‘t’ value between the rural boys and urban boys is 3.7520 which is greater than the theoretical ‘t’ vale at 0.05 level (1.96). So there is no significant difference between the rural boys and urban boys B.Ed. trainees with regard to awareness on ICT is rejected that means urban boys is more awareness on ICT than rural boys.

iii. The calculated ‘t’ value between the rural boys and urban girls is 4.1410 which is greater than the theoretical ‘t’ vale at 0.05 level (1.96). So there is no significant difference between the rural boys and urban girls B.Ed. trainees with regard to awareness on ICT is rejected that means urban girls is more awareness on ICT than rural boys.

iv. The calculated ‘t’ value between the rural girls and urban boys is 3.1068 which is greater than the theoretical ‘t’ vale at 0.05 level (1.96). So there is no significant difference between the rural girls and urban boys B.Ed. trainees with regard to awareness on ICT is rejected that means urban boys is more awareness on ICT than rural girls.

v. The calculated ‘t’ value between the rural girls and urban girls is 3.5020 which is greater than the theoretical ‘t’ vale at 0.05 level (1.96). So there is no significant difference between the rural girls and urban girls B.Ed. trainees with regard to awareness on ICT is rejected that means urban girls is more awareness on ICT than rural girls.

vi. The calculated ‘t’ value between the urban boys and urban girls is 0.5427 which is less than the theoretical ‘t’ vale at 0.05 level (1.96). So there is no significant difference between the urban boys and urban girls B.Ed. trainees with regard to awareness on ICT is accepted that means urban boys and urban girls B.Ed. trainees with regard to awareness on ICT is more or less same.
10. MAJOR FINDINGS OF THE STUDY

Our major findings reveal

i. 90% of the B.Ed trainees have awareness on ICT.

ii. There is no significant difference between the rural boys and rural girls B.Ed trainees with regard to awareness on ICT that means rural boys and rural girls B.Ed trainees with regard to awareness on ICT is more or less same.
iii. There is no significant difference between the urban boys and urban girls B.Ed trainees with regard to awareness on ICT that means urban boys and urban girls B.Ed trainees with regard to awareness on ICT is more or less same.

iv. There is a significant difference between the rural boys and urban boys B.Ed trainees with regard to awareness on ICT that means urban boys is more awareness on ICT than rural boys.

v. There is a significant difference between the rural boys and urban girls B.Ed trainees with regard to awareness on ICT that means urban girls is more awareness on ICT than rural boys.

vi. There is a significant difference between the rural girls and urban boys B.Ed trainees with regard to awareness on ICT that means urban boys is more awareness on ICT than rural girls.

vii. There is a significant difference between the rural girls and urban girls B.Ed trainees with regard to awareness on ICT that means urban girls is more awareness on ICT than rural girls.

11. IMPLICATIONS OF THE STUDY

i. To develop the steps for the creation of awareness on ICT should be taken by GOVT, NGO and the PUBLIC raises and maintains.

ii. All institutions must arrange seminars, workshops and panel discussion to create awareness on ICT.

iii. All the states motivate self-employment awareness to ICT in all levels.

iv. To develop awareness on ICT knowledge, attitude and skills among the B.Ed. trainees.

v. The institution must arrange exhibition in which the study of awareness on ICT and its problem should be given importance.

vi. B.Ed. trainees should read lot of books about awareness on ICT. Enough books on awareness on ICT should be available in the public library.

vii. The institution must incorporate ICT for teaching in different situation.

viii. The institution must incorporate ICT for management technique in different situation.

ix. The student teachers can visit any university which established the ICT laboratory for education purpose only such as educational studio, e-content development centre and etc.

x. Student teachers are motivated to prepare and present the subject matter by using ICT.

12. CONCLUSION

The researcher found that the topic “A study on information and communication technology awareness among B.Ed. trainees in college of education in Pudukkottai district”, is promoting a behavioral change through awareness of ICT in education. ICT has undoubtedly become a powerful tool that is breaking the traditional methods of education. ICT based teaching learning process may lead to effectiveness and efficiency of educational system. Nowadays, most of the educational institutions have ICT facilities in their college.
itself. They are sensitizing the relevance and importance of ICT in teacher education field. An attempt is made to study ICT awareness among B.Ed. Trainees. Based on the findings, the implications of the study are suggested.

13. REFERENCES


WEB SITES

[1] www.learnframe.com