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ICT Literacy among B.Ed Teacher Trainees

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Abstract
Today's fast-paced world is becoming increasingly characterized by technology driven communication, which has transformed the world into a large global connected community with ever increasing outreach of information and communication technology (ICT). Technology plays an increasingly important role in people's lives, and it is envisaged that technological literacy will soon become a functional requirement for people's work, social, and even personal lives. The aim of the study was to explore the ICT Literacy among B.Ed Teacher Trainees'. The investigator has used the survey method to collect the data. The investigator has selected 40 students studying in B.Ed., course at Sri Ragavendara College of Education in Dindigul district. Finding of the study revealed that, there was no significant difference between male and female B.Ed Student teachers on ICT Literacy. There was no significant difference between Tamil and English B.Ed student teachers on ICT Literacy. There was significant difference between Rural and Urban B.Ed student teachers on ICT Literacy. Hence, B.Ed student trainees' had moderate level of ICT literacy and the urban B.Ed teacher trainees mean scores was higher than the rural.

Keywords: Information and Communication Technology, ICT Literacy, and B.Ed Teacher Trainees

Introduction
Information and Communication Technology has permeated in every walk of life affecting the technology fields such as launching satellites, managing businesses across the globe and also enabling social networking. The convergence of computer, communication and content technologies, being known as ICT, has attracted attention of academia, business, government and communities to use it for innovative profitable propositions. Year by year it is becoming simpler to use devices such as desktop palm top, iPad etc.

21st Century is characterized with the emergence of knowledge based society wherein ICT plays a pivotal role. The National Curriculum Framework 2005 (NCF 2005) has also highlighted the importance of ICT in school education. With this backdrop, major paradigm shift is imperative in education characterized by imparting instructions, collaborative learning, and multidisciplinary problem-solving and promoting critical thinking skills.

Government of India has announced 2010-2020 as the decade of innovation. Reasoning and Critical Thinking skills are laid at School level. It is desirable that affordable ICT tools and techniques should be integrated into classroom instructions right from primary stag so as to enable students develop their requisite skills. Most of the tools, techniques and tutorials are available in Open domain and accessible on Web.

Review of related literature
Madasiru Olalere Yusuf, Horence Olutune Daramola and Oloyede Soloman Oyelekan (2015) [8], a study on ICT Literacy among student teachers in Universities in North Central Nigeria; This study was conducted to find out the information and communication technology literacy levels among student-teachers in the universities in North-Central Nigeria. The study involved a total of 638 student-teachers (360 males and 278 females). The instrument used for the study was a researcher-designed questionnaire. There was no significant difference in the level of ICT literacy between male and female student teachers. The student teachers in the north central zone of Nigeria have an average ICT literacy.

Ovute AO and Ovute LE, (2015) [11], Extent of ICT software availability and teacher trainers' ICT literacy level in vocational education department: A case study of two federal colleges of education in Nigeria; Researcher-made structured questionnaire was administered on 92 teacher trainers in Vocational Education departments in two Federal Colleges of Education in Nigeria. The findings showed that ICT Software was lacking and majority of the teacher trainers was ICT non-literate. Priority in the provision of ICT software's by government, seminars/workshops and in service training for teacher trainers were among the recommendations made towards improving the situation in Colleges. Lina markauskaite (2006) [7], a study on Gender issues in pre-service teachers training: ICT literacy and online learning; the aim of the study was gender difference in ICT experience and ICT literacy among first year graduate teacher trainees'. Finding of the study reveals that, no significant difference between male and female teacher trainees on ICT experience. There was significant difference between male and female teacher trainees on ICT literacy. ICT literacy means score was high than female teacher trainees'.

Sivasankar A, (2014) [18], a conducted study on ICT Awareness among Higher Secondary School Teachers in Tirunelveli District. The main aim of the study was to find out ICT awareness of higher secondary school teachers. Simple random sampling technique was used, to draw a sample of 294 higher secondary school teachers from Tirunelveli district in Tamilnadu. The tool ICT awareness scale was adopted. The findings reveals that the higher secondary school teachers from English medium, teachers from urban areas and matriculation higher secondary school teachers are better in their ICT awareness than their counter parts.

Statement of the problem
ICT has significant impact on the changing scenario of

education. It is the fundamental necessity of student teachers. Student teachers make use of the ICT to learn and play. Through the ICT, the student can find knowledge resources in any discipline. They can also share their ideas in any part of the world through, World Wide Web, E-mail, PPT and bulletin board system. It leads to improve thinking and problem-solving. ICT is a wonderful tool for students teacher to make their teaching very effective. E-mail has changed the way, thus students work and communicate within few minutes of efforts a message to one or many individual can be composed, send and received. Chatting has become a very popular type of discussion. Chat groups direct the students live communication with others by typing words on computer. ICT helps the students to develop their interest in studying through simulation and multimedia techniques. So the investigator tries to study on "ICT Literacy among B.Ed. Student Trainees".

Variables

ICT Literacy as an Independent variable and B.Ed Teacher Trainees' as a dependent variable.

Objectives

- To explore the ICT literacy among the B.Ed., teacher trainees.
- To find out the mean score of B.Ed., teacher trainees on ICT literacy
- To find out the significant difference between Tamil & English medium of B.Ed Teacher Trainees on ICT Literacy.
- To explore the significant difference between rural and urban of B.Ed Teacher Trainees on ICT Literacy.

Hypotheses

- There is no significant difference between the mean scores of ICT literacy among male and female teacher trainees.
- There is no significant difference between the mean scores of ICT literacy among Tamil and English language teacher trainees.
- There is no significant difference between the mean scores of ICT literacy among rural and urban teacher trainees.

Methodology

The investigator has used the survey method to collect the data. The researcher has selected 40 teacher trainees studying in B.Ed., course at Sri Ragavendara College of Education in Din Digul district.

Sample

The Sample consists of 40 Student teachers selected from Sri Ragavendara College of Education in Dindigul district by using Simple Random Sampling technique.

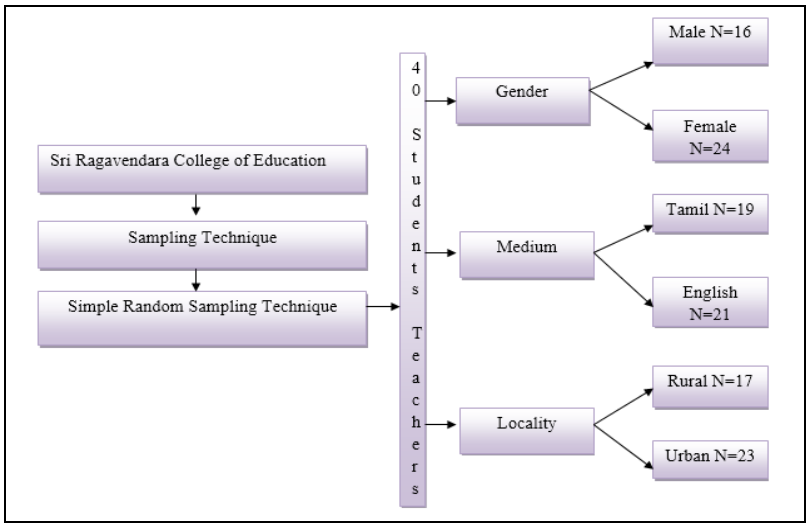

Fig 1: Sampling design

Procedure

The investigator contacted and obtained permission from the principal B.Ed., colleges. The willingness and co-operation of the respective teacher trainees are also sought. The data were collected personally by the investigator, from the randomly selected 40 students, proper instructions were given to the teacher trainees before starting to fill the questions. ICT literacy was given to each teacher trainees and answer sheet with personal detail form.

Table 1: Scoring Criteria of ICT Literacy

Criteria (Mean Score)	Quality measures
20-25	High
15-20	Moderate (Total mean score 17.31)
10-15	Low

Tools

For this study a test was developed to assess the ICT literacy among B.Ed., students. The assessment tool of ICT literacy among B.Ed. Students consisted of the information and communication technology pertaining to the following items.

- Introduction to ICT
- Hardware and Software
- Projective Equipment
- Television
- Educational Radio
- Language Laboratory
- Teleconferencing
- ICT in India
- E-Learning
- Cloud Computing

- Internet and it Application
- Computer and it applications

Each correct response one marks and wrong response zero marks.

Data Analysis and Interpretation

Hypothesis 1: There is no significant difference in ICT Literacy among male and female B.Ed teacher trainees

Table 2

Variable Gender	Number	Mean	S.D	df	t-value	Level of Significance
Male	16	17.12	2.02	38	0.66	Not Significant
Female	24	17.50	1.56			

* Not Significant at 0.05 level

The above table 1.1 reveals that the calculated 't' value 0.66 is less than the table value at 0.05 level of significance. There is no significant difference between male and female B.Ed student teachers. Hence, above null hypothesis was accepted.

Hypothesis 2: There is no significant difference in ICT Literacy among Tamil and English Medium B.Ed teacher trainees

Table 3

Variable Medium	Number	Mean	S.D	t-value	Level of Significance
Tamil	19	17.53	1.61	0.55	Not Significant
English	21	17.19	1.88		

*Not Significant at 0.05 level

The above table 3 reveals that the calculated 't' value 0.55 is greater than the table value at 0.05 level of significance. There was no significant difference between Tamil and English medium B.Ed teacher trainees. Hence, above null hypothesis was accepted.

Hypothesis 3: There is no significant difference in ICT Literacy among Rural and Urban group B.Ed teacher trainees

Table 4

Variable Group	Number	Mean	S.D	t-value	Level of Significance
Science	17	17.88	1.74	1.69	Significant
Arts	23	16.96	1.69		

*Significant at 0.05 level

The above table 4 reveals that the calculated 't' value 1.69 is less than the table value at 0.05 level of significance. There was no significant difference between Rural and Urban B.Ed teacher trainees. Hence, above null hypothesis was rejected.

Major Findings of the Study

- There was no significant difference between male and female B.Ed teacher trainees on ICT Literacy
- There was no significant difference between Tamil and English B.Ed teacher trainees on ICT Literacy
- There was significant difference between Rural and Urban B.Ed teacher trainees on ICT Literacy
- Urban teacher trainees ICT literacy was higher than the rural B.Ed teacher trainees.

Educational Implication

- Teacher trainees should have knowledge of ICT use and integration in order to bridge the digital divide in today's technological age.
- The use and integration of ICT should be implemented across the curriculum in order to ensure the full integration and use of ICT in teacher education.
- Efforts should be made by government to post and provide teachers skilled in ICT to each college to impact ICT skills to the students.
- Awareness programs should be conducted to the parents about the importance of ICT skills so that they also motivate and help their children to get ICT literacy.

Conclusion

Today, technology is a part of almost every aspect of life and learning. Technology enables work and communication for business and pleasure often with a strong emphasis on hardware, software, portable devices, and "apps". However, it is not enough for teachers to be merely ICT literate. 21st Century teachers and teacher trainees need a broader literacy that guides that use of these tools and applications. Many research studies found teachers have moderated level of ICT Literacy. In the present study investigator has found significant difference between rural and urban B.Ed teacher trainees on ICT Literacy. Urban B.Ed teacher trainees ICT literacy was higher than the rural teacher trainees.

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