

## Computer awareness among teacher trainees of Bilaspur (C.G.): A field survey

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### Abstract

Now a days education field is technically and modernized have important place of computer to make easy of teaching learning process. In this sense the role of teacher is also changed Day by Day with the uses of radio, television, computer, mobile and internet and education has become more expanding and impressive with the use of computer. The study was designed to examine the computer awareness of teacher trainees in Bilaspur region of C.G. State. The sample consist of 200 teacher trainees by random sampling. The researcher used Self-made computer awareness test for collecting data. The collected data analysed with Mean, SD and t-test statistical techniques. The finding of the study reveals that the performance of science teacher trainees and Arts Teacher trainees is the same and urban teacher trainees Computer awareness is significantly better than the rural teacher trainees. But male and female teacher trainees computer awareness mean score is not significantly differ. Implications and suggestions are also pointed out in the paper.

**Keywords:** computer awareness, teacher trainees

### Introduction

Education is a Powerful tool for social reform and progressive social mobility. Education is the new insight in the field of pedagogy. 21<sup>st</sup> century is grown up and developed very fast and drastic changes have been taking place. These are much upgraded one because of assessing technology every day. All these developments have brought about substantial changes in the methods and material of teaching and learning. Our Teacher Education institutions have not been able to keep pace with these developments. Researches on classroom process and present practices of teaching indicate that teaching in our schools remains mostly informative and that emphasis is still on memorisation of facts and assessment of these are through achievement test (Gopalan, 2003) [3].

The quality of education mainly depends on the efficiency and effectiveness of teachers. Teacher training institutions are faced with the challenge of preparing competent teachers of new generation who are technically so advanced that they could easily make a mark of their own in the digital era. Teacher education programmes have still not succeeded in producing a teacher well equipped for a technologically enriched classroom in spite of the advances in the information and communication technology. Therefore digital learning environment should be offered to the teaching community in such a way that they become masters in planning and presenting such technology based teaching and learning. To increase the involvement of teachers, they should implement their own ideas and imagination into the materials. Modern teachers should remember that now the classrooms are no more a traditional classroom of chalk and talk. Instead, it is individual and small group stations containing computer, LCD, Projectors, Interactive White boards etc to fill the room. But only about this class room teaching materials are not enough to impart knowledge so education techno-friendly teacher involvement plays a vital role. "If you are a teacher educator, you cannot afford to leave it (the integration of

computers) to the professor who teaches a class on technology" (Leu, 2000) [4].

### Computer Awareness

Computers are fast, accurate and stupid. Humans are slow, inaccurate and brilliant. Together they are powerful beyond belief. - Albert Einstein (1879-1955)

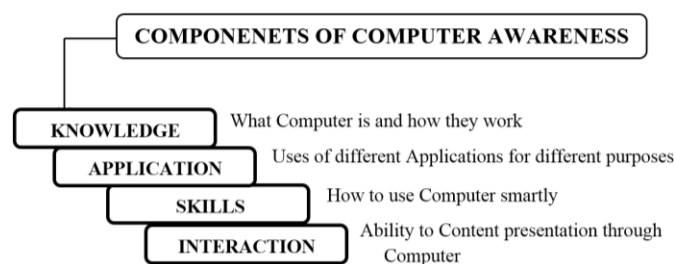
Computer awareness is an awareness of applicability of computer in working field that is specifically could call in teaching and learning. In other way it is the awareness of computer knowledge, interaction with computer, Application and skills necessary to perform tasks in word processing, database, spread sheets, presentation, graphics, and basic operating system functions.

Computer use in the classroom may be the first major change to move from the bottom of the educational hierarchy up, rather than from the top down. In attempting the encourage experimentation with new ideas and techniques, it is helpful to involve teachers in situation in which they can see results following their own interests in using the computer as a learning tool (Adams, 1985) [1].

Education has become more expanding and impressive with the use of computer. Due to computer, a new direction is shown to the education field. Internet is also the modern invention, which has been come in to existence due to computer. In education, creative approach is acceptable. Indeed, the teacher may not sustain its own place if he fails to provide help to their students in the modern stream. Therefore, to handle them in this modern century's changing scenario, teacher must be well equipped with these technologies. Today's teacher is the important factor of the whole education system. It is better that he will be equipped with the higher level of educational quality will be given. The positive factor of this changing role of the teacher is his knowledge about internet as the use of computer and internet has become worldwide.

Computers have been effectively used in the teaching and learning of foreign languages since the 1960s. Some of the reasons for using computers in language learning and teaching include experiential learning, enhancing achievement and motivation, authentic and genuine study materials, greater interaction, individualization, independence from a single source of information, and global understanding (Lee, 2000). Need of pre-service teacher to enhance knowledge and awareness of computer use as a teaching tool (Milbrath & Kinzie, 2000) [5].

Researches proof that computer and technology can change the way of teachers teach and enhance the quality of teaching learning process. It is especially useful in supporting mode student centred approaches to instruction, developing the higher order skills and promoting collaborative activities. Most of the early computer teacher training programmes in the 1990's focused on use of computer technology as the main training content this approach has an Emphasis on teacher training in how to use computer in the classroom. To making teachers' teaching effective and be well aware about the computer they must have knowledge about computer awareness some important components are- *Knowledge, Application, Skills, Interaction*. These components are interconnected so aware teacher can make class useful and purposeful.



- a) **Knowledge-** there is talk to about computer related basic knowledge like how they work, and related hardware and software, Input - output devices and other related information about computer
- b) **Application** of computer is related to uses of software for different purpose like M.S. Word uses for documents purpose, M.S. Excel uses for data analyse purpose, M.S. Power point uses for presentation and etc. software.
- c) **Skills** using of computer smartly with shortcuts and how to formatting and getting other functions for doing smartly work with computer while teaching.
- d) **Interaction** Ability to content presentation through computer in the classroom and to interact with students through computer like audio video and teleconferencing in the classroom.

**National Education Policy (1986)** has been suggested about the Computerisation in teaching-learning. This method will be employed in the expansion of literacy, the utility of correspondence courses, T.V., Radio, and satellite and video-cassettes has been accepted for education in this policy (Chaube, 1990.) [2]

**A Technically Competent Teacher Must Able To**

**Ranjan, R. & Kothiwala, K. (2006)** [7] are indicated in their research about the abilities of technologically competent teachers to integrates with each components of teaching and learning as following are-

1. Operate Computers and use basic software for word processing. Spread sheets, email, etc.
2. Evaluate and use Computers and related ICT tools for instruction
3. Apply Current Instructional principles, research and appropriate assessment practices to the use of ICTs
4. Evaluate Educational Software
5. Create Effective Computer-based Presentation
6. Search the Internet for Resources
7. Integrate ICT tools into student learning activities across the curriculum
8. Create multimedia documents to support instruction, create hypertext documents to support instruction
9. Demonstrate knowledge of ethics and equity issues related to technology
10. Keep up-to-date as far as educational technology is concerned

**Objectives**

The following specific objectives emerged from the statement of the research problem:

1. To study the Computer Awareness among Teacher trainees with respect to locality.
2. To Study the Computer Awareness among Teacher trainees with respect to Subject Stream.
3. To study the Computer Awareness among Teacher trainees with respect to gender

**Research Hypotheses**

1. There will be no significant difference between Rural and Urban Teacher trainees of Computer Awareness.
2. There will be no significant difference between Arts and Science Teacher trainees of computer Awareness
3. There will be no significant difference between Male and female Teacher trainees of Computer Awareness.

**Methodology**

Quantitative approach was applied in this study. The nature of this study is a descriptive and Survey method was used. In this study examine the computer Awareness of Teacher trainees.

**Sample**

Researcher has adopted the Stratified Random sampling technique, a sample of 200 Teacher trainees consisted of 100 male teacher trainees (50 rural (25 Science and 25 Arts) 50 Urban (25 Science and 25 Arts) & 100 female teacher trainees (50 rural (25 Science and 25 Arts) 50 Urban (25 Science and 25 Arts) from five district of Bilaspur region of C.G. state was selected for the purpose of investigation of this study.

**Tools Used**

Computer Awareness Test was used in this study. It is a self-made tool which is standardized by the researcher.

**Satatistical Technque**

All completed tool was used for data analysis using statistical techniques such as mean, standard-deviation and t-test.

**Analysis and Interpretation**

**Ho1:-** “There will be no significant difference between Rural and Urban Teacher trainees of Computer Awareness.” The

data related to this hypothesis were analysed by t-test. The results are presented in Table No. 01

**Table 1:** Summary of the t-values for Computer Awareness score of Rural and Urban Teacher trainees

Group	N	Mean	S.D.	Df	t-value	Level of Significance
Rural	100	21.00	6.460	198	2.061*	0.05
Urban	100	23.11	7.939			

\*Significant at 0.05 level (with df 100+100-2=198)

From table 01 it is found that the calculated t-value i.e. 2.061 is greater than the t-table value i.e. 1.97 at 0.5 level of significance with df =198. Thus the null hypothesis that there is no significant difference between Rural and Urban Teacher trainees of Computer Awareness is rejected. Hence it can be stated that there is significant mean difference between Rural and Urban Teacher trainees of Computer Awareness. It can be concluded that performance of Urban Teacher trainees are significantly better than Rural Teacher trainees.

**Ho2:**– “There is no significant difference between Science and Arts Teacher trainees of Computer Awareness”. The data related to this hypothesis were analysed by t-test. The results are presented in Table No. 02

**Table 2:** Summary of the t-values for Computer Awareness score of Science and Arts Teacher trainees

Group	N	Mean	S.D.	Df	t-value	Level of Significance
Science	100	22.58	6.675	198	1.018**	0.05
Arts	100	21.53	7.868			

\*\* Not Significant at 0.05 level (with Df 100+100-2=198)

From table 02 it is found that the calculated t-value i.e. 1.018 is less than the t-table value i.e. 1.97 at 0.5 level of significance with df =198. Thus the null hypothesis that there is no significant difference between Science and Arts Teacher trainees of Computer Awareness is not rejected. Hence it can be stated that there is no significant mean difference between Science and Arts Teacher trainees of Computer Awareness. It can be concluded that performance of Science Teacher trainees and Arts Teacher trainees is the same.

**Ho3:**– “There is no significant difference between Male and Female Teacher trainees of Computer Awareness”. The data related to this hypothesis were analysed by t-test. The results are presented in Table No. 03.

**Table 3:** Summary of the t-values for Computer Awareness score of Male and Female Teacher trainees

Group	N	Mean	S.D.	Df	t-value	Level of Significance
Male	100	22.28	7.021	198	.190**	0.05
Female-	100	21.83	7.591			

\*\* Not Significant at 0.05 level (with df 100+100-2=198)

From table 03 it is found that the calculated t-value i.e. .190 is less than the t-table value i.e. 1.97 at 0.5 level of significance with df =198. Thus the null hypothesis that there is no significant difference between Male and Female Teacher trainees of Computer Awareness is not rejected. Hence it can be stated that there is no significant mean difference between Male and Female Teacher trainees of Computer Awareness. It

can be concluded that performance of Male Teacher trainees and Female Teacher trainees is the same.

**Educational Implications**

1. This study will help the Teacher trainees to know the teaching learning components of Computer.
2. This study will help developing interest in teachers about computer.
3. This study will help the basic knowledge of computer.
4. This study will help the teachers for using computer in classroom.
5. This study will help the teachers for how to interact with computer in classroom.

**Suggestions**

Computer helps in effective teaching learning process which makes students well awaked and effective learning in classroom. So every service and in-service teachers should be used computer in classroom and made an effective and interesting teaching. Teachers should be participating in refresher course and workshops related to computer. This all components would made well equipped and effective teacher to teacher trainees.

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