

# INFORMATION AND COMMUNICATION TECHNOLOGY AWARENESS AMONG PROSPECTIVE TEACHERS

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## ABSTRACT

*The present study aims to examine the awareness of prospective teachers towards ICT. The investigator has adopted the descriptive survey method of research. The sample consists of 150 prospective teachers from colleges of education in Sivagangai district selected by stratified random sampling technique. Information and Communication Technology Awareness Scale (ICTAS) is used to collect data .To find out the meaning, interpretation of the raw scores, the data were analysed using mean, standard deviation 't' test. The findings show that there is no significant difference in the awareness of prospective teachers towards ICT with regard to gender. Urban and Science studied prospective teacher's information and communication technology awareness is better than rural and arts studied prospective teachers.*

**Keywords:** *ICT awareness, Information and Communication technology, prospective teachers*

## INTRODUCTION

Information and Communication Technology is the buzzword today everywhere as the world has entered into an information and communication age. "Information and Communication Technologies." ICT refers to technologies that provide access to information through telecommunications. It is similar to Information Technology (IT), but focuses primarily on communication technologies. This includes the Internet, wireless networks, cell phones, and other communication mediums. ICT is mostly presumed to be a platform and catalyst of trending educational change [1]. So many ICT tools and approaches are utilized in the educational industry for the learning and teaching process. They are multimedia, teleconferencing, video conferencing, Web conferencing, learning management system and mobile learning approach [2]. In 1998, UNESCO World Education report refers about student and teachers must have sufficient access to improve digital technology and the internet in their classroom, schools, and teacher educational institutions. Teachers must have the knowledge and skills to use new digital tools to help all students achieve high academic standard. The quality of professional development of teacher education depends on the extent of ICT integration in teacher education programme. According to UNESCO (2002) "ICT is a scientific, technological and engineering discipline and management technique used in handling information, its application and association with social, economic and cultural matters".

## ICT AND TEACHER EDUCATION

The quality of education depends upon the quality of teachers, which in turn depends upon the quality of teacher education. Today education has degenerated into a process of information transformation with the sole objective of passing examinations. In order to improve the quality of education there is a need to improve the quality of teacher education [3]. The use of ICT in teacher education has received a great attention for quality learning and teaching [4]. When teachers are digitally literate and trained to use ICT, these approaches can lead to higher order thinking skills, provide creative and individualized options for students to express their understandings, and leave students better prepared to deal with ongoing technological change in society and the workplace [5]. As per teacher education curriculum frame work by NCF (2005) teacher education institutions are expected to equip future teachers with latest methods, techniques and strategies for imparting instruction, including the use of technological equipments

## REVIEW OF RELATED LITERATURE

**Ntshakala (2016)** designed a theoretical model of the factors influencing the awareness perceived of ICTs by the school teachers of physical education (PE). From one of the province of South Africa, 73 teachers were selected for survey. The Technology Adoption Model (TAM) was presented with the main factors which were having more effect on perceived awareness. Those factors include demographics, performance expectancy, social influence and computer attitude. As this study basically focused on the ICTs awareness of PE school teachers and did not cover the higher education faculty

**B.Senthil et al., (2015)** have discussed the computer-based tools and its effectiveness on learning and teaching. His findings reveal that ICT tools are very useful and effective. His findings also reveal that ICT tools are used to provide the right information at the right time for the right people.

**T. Teo (2008)** carried out a survey on pre-service teachers' attitude towards computer use in Singapore. 139 sample pre-service teachers were assessed for their computer attitudes using questionnaire with four factors: affect (liking), perceived usefulness, noticed control, and Information and Communication Technology Awareness among Teacher Educators factual intention to use the computer. He stated that teachers were more specific about their attitude towards computers and intention to use computer than their perception of the usefulness of the computer and their control of the computer.

## NEED OF THE STUDY

Teachers have placed a vital role in community and society preparation towards explore new horizons and attaining high progress and development .Education technology and teaching skills combine together contribute solution to the issues of the country by developing enviable understanding of attitudes, abilities and skills of the pupils. In every day classroom the teacher faces countless number of challenges .These challenges to be set with most appropriate research works and progress in teaching with technology. So the quality of teaching also enhanced. This paper describes the awareness in information and communication Technology among prospective teachers.

## OBJECTIVES

- To study the awareness of information and communication technology among prospective teachers.
- To study whether the students belongs to different groups based on gender, subject studied and locality differ significantly in their ICT awareness.

## HYPOTHESIS

- Prospective teachers have awareness of ICT
- There is no significant difference in the awareness of ICT among prospective teachers with respect to gender.
- There is no significant difference in the awareness of ICT among prospective teachers with respect to locale.
- There is no significant difference in the awareness of ICT among prospective teachers with respect to subject studied in their UG/PG course.

## METHOD & PROCEDURE

Descriptive survey research is used in this study

### Sample

Random sampling techniques were used to collect data. The present study was conducted on a sample of 150 B.Ed. students from colleges of education in Sivagangai district.

### Tool

Information and Communication Technology Awareness Scale (ICTAS) constructed and standardized by M.Anbuezhian consist of 53 items of which relates to ICT awareness.

### Scoring

If the response was correct, one mark was given, if the response was wrong, no mark was given.

### Statistical Technique

Descriptive analysis and differential analysis were adopted to test the hypothesis

Descriptive analysis (mean, standard deviation)

Differential analysis (t-test)

## RESULT AND DISCUSSION

**Hypothesis 1:** There is no significant difference in the awareness of ICT among prospective teachers with respect to gender.

**Table:1 Table showing the mean difference in the awareness of ICT among prospective teachers with respect to gender.**

Groups	Mean	Standard Deviation	t-value
Female	79.96	6.95	0.326
male	81.9	8.74	

The calculated t value is 0.326, which is significant at 0.05 level. Thus the null hypothesis is accepted. It is found that there is no significant difference in the awareness of ICT among prospective teachers with respect to gender.

**Hypothesis 2:** There is no significant difference in the awareness of ICT among prospective teachers with respect to locale.

**Table:2 Table showing the mean difference in the awareness of ICT among prospective teachers with respect to locale.**

Groups	Mean	Standard Deviation	t-value
Rural	33.5	4.48	0.09
Urban	36.24	4.42	

Calculated t-value is 0.09, which is not significant at 0.05 levels. Thus, the null hypothesis cannot be accepted. Mean ICT awareness scores of rural and urban prospective teachers are 33.5 and 36.24 respectively. It means that when compared with rural prospective teachers urban prospective teachers have more awareness towards ICT.

**Hypothesis 3:** There is no significant difference in the awareness of ICT among prospective teachers with respect to subject studied in their UG/PG course.

**Table:3 Table showing the mean difference in the awareness of ICT among prospective teachers with respect to subject studied in their UG/PG course.**

Groups	Mean	Standard Deviation	t-value
arts	32.33	4.47	0.06
science	33.04	4.42	

Calculated t-value is 0.06, which is not significant at 0.05 levels. Thus, the null hypothesis cannot be accepted. Mean ICT awareness scores of arts and science prospective teachers are 32.33 and 33.04 respectively. It means that when compared with arts prospective teachers science prospective teachers have more awareness towards ICT.

## IMPLICATIONS

- All prospective teachers to be given ICT as part of in-service training as it makes teaching more effective and develops positive attitude towards ICT
- The workshops and seminars on ICT integration in teaching and learning may be included in the teacher education curriculum at all levels.
- Creation of appropriate instructional and infrastructural facilities for ICT integration in all the teacher education institutions is made mandatory

## CONCLUSION

Conventional methods of teaching could never develop a plan effective foundation for critical thinking and understanding for the students. They gain knowledge more when learning became individual and it is only possible by using Information Communication Technology in classroom situation. Through is the students would have the capacity to build their own idea and find solutions to their problems. It will be more probable when teachers will have adequate knowledge and awareness regarding ICT. The teachers should be given practicum training inculcating skills associated to ICT for its awareness. If the teachers are fully aware, they will have the capacity to guide their students for their bright future

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