



INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

“ICT EDUCATION FOR PROSPECTIVE TEACHERS – ATTITUDES OF TEACHER EDUCATORS AND PROSPECTIVE TEACHERS”

***Dr.R.Sambasivarao, Assistant Professor, University College of Education, AdikaviNannaya University, Rajamahendravaram, East Godavari District**

**** Dr. G. Lakshmi Subbaiah, Principal, Chaitanya College of Education, Nidadavolu, West Godavari District**

Abstract

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 (UNESCO, 2002). ICT stands for Information and Communication Technologies. ICT is a part of our lives for the last few decades affecting our society as well as individual life. ICT is now broadly using in the field of educational. Teacher, Student, administrator and all the stake holders of education are popularly using ICT. Teacher use ICT for making teaching learning process easy and interesting. A competent teacher should have several skills and techniques for providing successful teaching. All such skills should develop in prospective teachers in their pre-service training i.e. in their B.Ed training. In this context the researchers tried to explore the attitudes of Teacher Educators and Prospective Teachers.

Key Words: ICT, IT, Attitudes, Teacher Educators, Prospective Teachers, Pre-Service Training

Introduction

Information and Communication Technology (ICT) has become common place entities in all aspects of life. Across the past three decades the use of the ICT has fundamentally changed the practices and procedures of nearly all forms of the endeavor within society and education. Within education, ICT has begun to have a presence but impact has not been as extensive as in other fields. Education is a very socially oriented activity and quality education has traditionally been associated with strong teachers having high degrees of personal contact with learners. The use of ICT in education lends itself to more student centered learning setting and often this creates some tensions to some teachers and students. But the world is rapidly moving into digital media and information and this importance will continue to grow and develop in the 21st century.

Information and Communication Technology (ICT) is often used as an extended synonym for Information Technology (IT), but is a more specific term that stresses the role of unified and the integration of telecommunications, computers as well as necessary enterprise software, courseware, middleware, storage and audio-visual systems which enables users to access , store, transmit and manipulate information.

Use of ICT for Prospective Teachers

All most all the classroom is changed its look from the traditional to ICT based. Now teachers as well as students participate in classroom discussion using technology. Now Education is based on child centric education. So the teacher should prepare to cope up with different technology for using them in the classroom for making teaching learning effective. For effective use of certain student centered methodologies such as project-based learning which puts the students in the role of innovators and ICT becomes the appropriate tool. ICT has enabled better and swifter communication; presentation of ideas more effective and relevant way. It is an effective tool for information acquiring-thus students are encouraged to look for information from multiple sources and they are now more informed then before. In this context, ICT is very essential for Prospective Teachers.

Teacher Educators and Computer Usage

Teacher educators at all levels utilize computer and ICT to manage assignments and lesson plans, monitor evaluations or offer online direction. Numerous teacher educators' utilize online assets in their every day exercises. Notwithstanding books, video and different materials, self-guided student teachers frequently utilize advanced technology to proceed with their training outside of, conventional offices. At the point when teacher educators utilize advanced technology to enable them to finish undertakings which they see as issues, at that point they are probably going to have a more inspirational demeanor towards the utilization of advanced technology, and are probably going to search for additionally assignments which can be finished utilizing an internet. Assuming, in any case, teacher educators utilize a advanced technology to finish what

they respect to be a superfluous undertaking or in utilizing the ICT through internet, the lesson plans is made more troublesome or less fulfilling, at that point they are less inclined to utilize advanced technology later on. Teacher educators can make their teaching more affective by using education technology through internet. They can use it in classroom as power point presentation of lesson plans.

Different Strategies for applying ICT in Teacher Education

1. Providing adequate infrastructure and technical support.
2. Applying ICT in all subjects.
3. Applying new Pre-service teacher Education curriculum.
4. By using application software, using multimedia, Internet e-mail, communities, understanding system software.

Developing Knowledge of Computer Education and ICT Skills

In the rising methodology, teacher educators are building up their Computer education and ICT proficiency, figuring out how to apply Computer education and ICT to a scope of individual and expert assignments. The accentuation is on preparing in a scope of instruments and applications, and expanding their attention to the chances to apply Computer education and ICT to their instructing later on.

ICT education isn't generally extraordinary for students than for educators: the fundamental ideas of comprehension and utilizing ICT contain basically similar 42 components. Henceforth, for this essential level of instructor proficiency, indistinguishable units from for the understudy educational modules displayed in Chapter IV are proper. As of now showed, these ICT education units have a parallel with the International and European Computer Driving License. Obviously, the genuine utilization of ICT will be diverse for educators than it is for understudies.

STATEMENT OF THE PROBLEM:

“ICT EDUCATION FOR PROSPECTIVE TEACHERS – ATTITUDES OF TEACHER EDUCATORS AND PROSPECTIVE TEACHERS”

Need for the Study

Although the task may seem daunting, it is crucial that schools begin to really investigate into their use of technology in the classroom. The benefits are endless and schools are forced to face the fact that if they don't get on the technology bandwagon, they're going to fall behind. This does not mean that schools need to strive for a 1:1 ratio for students and computers, but schools do need to consider their technology programs and where they can begin and continue to educational opportunities through the use of technology. By introducing Smart Boards, Elmos, Podcasts and Web Quests, teachers are obligated to open doors to new and

innovative possibilities for exciting adventures in learning. Teacher play a vital role in any initiative aimed at improving teaching and learning process. Moreover, ICT's at schools will have little impact if teachers are not actively involved in all phases of their integration to the curriculum. Teachers are 48 required to decide how to make appropriate educational use of ICT in the classroom. In other words, teachers need to upgrade their skills and knowledge in the field of ICT as well as in other subject fields; teachers trainees are would be teachers so it is must to teach them with ICT so that they can teach in a better way.

Objectives of the Study

1. To know the significant difference among Teacher Educators working in teacher educational institutions in relation to their attitudes towards Computer & ICT Education on the basis of their gender and teaching experience.
2. To know the significant difference among Student Teachers studying in teacher educational institutions in relation to their attitudes towards Computer & ICT Education on the basis of their gender and Year of Education.

Hypotheses

1. There is no significant difference among Teacher Educators working in teacher educational institutions in relation to their attitudes towards Computer & ICT Education on the basis of their gender.
2. There is no significant difference among Teacher Educators working in teacher educational institutions in relation to their attitudes towards Computer & ICT Education on the basis of their teaching experience.
3. There is no significant difference among Student Teachers learning in teacher educational institutions in relation to their attitudes towards Computer & ICT Education on the basis of their gender.
4. There is no significant difference among Student Teachers learning in teacher educational institutions in relation to their attitudes towards Computer & ICT Education on the basis of their Year of Education.

Methodology

According to objectives, survey method was adopted for the study.

Survey method: Survey method is used to obtain descriptive information about target population. Survey method in education involves collection of information from members of a group of student teachers, teacher educators, etc, and analysis of this information to illuminate important educational issues. Basic instrument in survey method is usually a set of questions which is asked from target group about their attitude, gender, teaching experience, educational qualifications, professional qualifications, etc.

Sample & Sampling Technique: In order to select a representative sample for the study random sampling technique was used. For preliminary sample 120 teacher educators and 400 students teachers were considered as sample for the present study. Care was taken to cover the representative sample of the population in spite of administrative difficulties.

Tools

There are a number of tools to be adopted in any research for the purpose of collecting data-some of them are questionnaire, Opinionative, rating scales, checklists, observation, interviews, schedules etc., each tool is particularly appropriate for collecting data of a certain type the investigator used the questionnaire as it is found to be more suitable and helpful to present the study. Separate tools for Teacher Educators and Student Teachers were constructed and used to collect data.

The questionnaire is probably the most widely used device employed in collecting data “The questionnaire has unique advantage, it may survey as a most appropriate and useful data gathering devices in a particular research project”.

Variables

An important step in designing all quantitative research projects is defining or identifying the variables that will be manipulated, measured, described, or controlled. The present study demanded the information on Gender, Number of years teaching experience as teacher educator, Gender, year of the Study related to Teacher educators and Student Teachers in the B.Ed colleges of Adikavi Nannaya University respectively

Testing Of Hypotheses

1. Gender vs. Attitudes of Teacher Educators

The following hypothesis has been formulated with regard to attitudes of the Principals. “There is no significant difference among Teacher Educators working in teacher educational institutions in relation to their attitudes towards Computer & ICT Education on the basis of their gender”. The results pertaining to the above hypothesis are presented in Table 1.

Table 1

Showing the Mean, Standard Deviation, degrees of freedom and t-value among Teacher Educators with regard to attitudes towards Computer and ICT Education on the basis of their gender.

Variable (Gender)	N	Mean	SD	Degrees of freedom(df)	t-value	Sig.
Male	46	46.83	7.781	118	0.622	0.535
Female	74	45.91	7.952			

Level of Significance at 0.05 = 2.086

Discussion

Table 1 shows the mean values, standard deviation values and t-value among Teacher Educators working in teacher educational institutions in relation to their attitudes towards Computer & ICT Education on the basis of their gender. The mean value of male Teacher Educators is 46.83, standard deviation value is 7.78, correspondingly the mean value of female Teacher Educators is 45.91 and standard deviation value is 7.95. The calculated t value (0.622) is less than the tabulated t value (2.086) at (p=0.05) at 18 degrees freedom. On the basis of this evidence it is concluded that there is no significant difference in the opinions of the two groups (male and female teacher educators). **Hence, the null Hypothesis is accepted.**

2. Teaching Experience vs. Attitudes of Teacher Educators

The following hypothesis has been formulated with regard to attitudes of the Principals. “There is no significant difference among Teacher Educators working in teacher educational institutions in relation to their attitudes towards Computer & ICT Education on the basis of their teaching experience”. The results pertaining to the above hypothesis are presented in Table 2.

Table 2

Showing the Mean, Standard Deviation, degrees of freedom and t-value among Teacher Educators with regard to attitudes towards Computer and ICT Education on the basis of their teaching experience

Variable (Teaching Experience)	N	Mean	SD	Degrees of freedom(df)	t-value	Sig.
< 15 years	80	46.48	7.65	18	0.425	0.671
> 15 years	40	45.83	8.35			

Level of Significance at 0.05 = 2.086

Discussion

Table 2 shows the mean values, standard deviation values and t-value among Teacher Educators working in teacher educational institutions in relation to their attitudes towards Computer & ICT Education on the basis of their teaching experience. The mean value of male teacher educators is 46.48, standard deviation value is 7.65, correspondingly the mean value of female teacher educators is 45.83 and standard deviation value is 8.35. The calculated t value (0.425) which is less than the tabulated t value (2.086) at (p=0.05) at 118 degrees freedom. On the basis of this evidence it is concluded that there is no significant difference in the opinions of the two groups (15 years teaching experience teacher educators). **Hence, the null Hypothesis is accepted.**

3. Gender vs. Attitudes of Student Teachers

The following hypothesis has been formulated with regard to attitudes of the Student Teachers. “There is no significant difference among Student Teachers studying in teacher educational institutions in relation to their attitudes towards Computer & ICT Education on the basis of their gender”. The results pertaining to the above hypothesis are presented in Table 3.

Table 3

Showing the Mean, Standard Deviation, degrees of freedom and t-value among Student Teachers with regard to attitudes towards Computer and ICT Education on the basis of their gender

Variable (Gender)	N	Mean	SD	Degrees of freedom(df)	t-value	Sig.
Male	161	46.66	7.694	398	0.575	0.565
Female	239	46.23	7.327			

Level of Significance at 0.05 = 1.960

Discussion

Table 3 shows the mean values, standard deviation values and t-value among Student Teachers studying in teacher educational institutions in relation to their attitudes towards Computer & ICT Education on the basis of their gender. The mean value of male Student Teacher is 46.66, standard deviation value is 7.694, correspondingly the mean value of female Student Teachers is 46.23 and standard deviation value is 7.327. The calculated t value (0.575) is less than the tabulated t value (2.21) at (p=0.05) at 398 degrees freedom. On the basis of this evidence it is concluded that there is no significant difference in the opinions of the two groups (male and female student teachers). **Hence, the null Hypothesis is accepted.**

4. Year of Education vs. Attitudes of Student Teachers

The following hypothesis has been formulated with regard to attitudes of the Student Teachers. “There is no significant difference among Student Teachers studying in teacher educational institutions in relation to their attitudes towards Computer & ICT Education on the basis of their Year of Education”. The results pertaining to the above hypothesis are presented in Table 4.

Table 4

Showing the Mean, Standard Deviation, degrees of freedom and t-value among Student Teachers with regard to attitudes towards Computer and ICT Education on the basis of their Year of Education

Variable (Year of Education)	N	Mean	SD	Degrees of freedom(df)	t-value	Sig.
First year	200	46.06	7.414	498	0.930	0.353
Second year	200	46.75	7.529			

Level of Significance at 0.05 = 1.960

Discussion

Table 4 shows the mean values, standard deviation values and t-value among Teacher Teachers working in teacher educational institutions in relation to their attitudes towards Computer & ICT Education on the basis of their Year of Education. The mean value of first year student teachers is 46.06, standard deviation value is 7.414, correspondingly the mean value of second year student teachers is 46.75 and standard deviation value is 7.529. The calculated t value (0.930) which is less than the tabulated t value (1.960) at (p=0.05) at 398 degrees freedom. On the basis of this evidence it is concluded that there is no significant difference in the opinions of the two groups (First year and Second year student teachers). **Hence, the null Hypothesis is accepted.**

Findings

1. There is no significant difference among Teacher Educators working in teacher educational institutions affiliated to Osmania University, Hyderabad in relation to their attitudes towards Computer & ICT Education on the basis of their gender.
2. There is no significant difference among Teacher Educators working in teacher educational institutions in relation to their attitudes towards Computer & ICT Education on the basis of their teaching experience.
3. There is no significant difference among Student Teachers learning in teacher educational institutions in relation to their attitudes towards Computer & ICT Education on the basis of their gender.

4. There is no significant difference among Student Teachers learning in teacher educational institutions in relation to their attitudes towards Computer & ICT Education on the basis of their Year of Education.

Suggestion for Further Study

On the basis of the finding of the present investigation the investigator would like to suggest following for further research:

- The present study is confined only to Adikavi Nannaya University affiliated B.Ed. colleges, similar study may also be conducted in other universities of AP state.
- Present study is deals with a sample of 120 teacher educators and 400 student teachers. A large number of samples can be used.
- The same study can be conducted by taking into consideration subject-wise teachers' opinions with regard to knowledge and utilization of computers and ICT of B.Ed. colleges.
- In the present study the researcher used variables like gender, experience, academic qualifications and professionals qualifications, for further research similar study can also be conducted using other variables such as basing on subject, ethnicity background, etc.

REFERENCES:

1. Abang Ahmad Ridzuan, Hong Kian Sam & Aliza Ahmad (2001), "Teacher educators' attitudes toward computers: A study among the teacher educators in teacher training colleges in Johor, Malaysia", Jurnal Teknologi, vol.35(E), pp.21–32.
2. Angadi G.R. (2014), "Teachers' Attitude towards Information and Communication Technology (ICT)", International Journal of Education and Psychological Research (IJEPR), Vol. 3, Iss 1, pp.21-23.
3. Beena and Madhu Mathur (2012), "A Study on the ICT Awareness of M.Ed. Trainees", Int.J.Buss. Mgt. Eco.Res., Vol 3(4), pp.573-578
4. Deepty Gupta (2015), "Teacher Education Curriculum in context of Information & Communication Technology", Issues and Ideas in Education Vol. 3, No.2, pp. 85–101.
5. Fischer, M.A., and C.S. Gillespie. (2003): "Computers and young children's development". Young Children, vol.58 No.4, pp.85–91.
6. Johnson N. (2012), "Availability and Use of ICT among Teacher Educators in Karaikal Region", vol.3, Iss:1, pp.37-39.

7. Man Mohan Gupta (2015), “Attitude of Prospective Teachers towards the Use of Information and Communication Technology (ICT) in Teacher Education”, International Journal of Scientific Research Engineering & Technology (IJSRET), pp.117-121
8. PATAN MASTAN VALI (2019)“Implementation of Computer and ICT Education in the B.Ed. Colleges of Osmania University, Telangana state”.
9. National Council for Accreditation of Teacher Education (NCATE), (2005). NCATE's Current Standards for Technology and Teacher Education.
- 10.UNESCO (2007). “ICT in teacher education: case studies from the Asia-Pacific region. Case studies highlighting the importance of ICT in teacher education programmes in the Asia-Pacific region”, .Author: Meleisea,E.
11. Dr.R.S.S.Nehru (2014), ICT in Education, APH Publication, New Delhi.
- 12.Baishakhi Bhattacharjee and Kamal Deb, Role of ICT in 21st Century’s Teacher Education, International Journal of Education and Information Studies. ISSN 2277-3169 Volume 6, Number 1 (2016).

