

ICT Literacy of Student Teachers of Teacher Training Institutes

KEYWORDS

Mr. Muyeen Maqbool Mir

M.Ed Student, Department of Education and Training, Maulana Azad National Urdu University, Hyderabad (A.P.)

ABSTRACT ICT stands for information and communication technology, it deals with digital data and the ways of storing, retrieval, and transmission. This research was conducted to investigate the level and difference of ICT literacy of student teachers of Govt. and private teacher training institutes of Hyderabad City. The sample comprised of 200 student teachers of Govt. and private teacher training institutes of Hyderabad City. The data was collected by the self prepared tool based on the main elements of ICT literacy i.e. access, manage, integrate, evaluate, create and communicate. The findings indicate that the status of ICT literacy is average in student teachers of Hyderabad city. There was significant difference found between ICT literacy of student teachers of Govt. and private teacher training institutes of Hyderabad City were found better in ICT literacy than their counterparts of Govt. teacher training institutes of Hyderabad City.

Introduction:

Information and Communication Technology (ICT) can contribute to universal access to education, equity in education, the delivery of quality learning and teaching, teachers' professional development and more efficient education management, governance and administration. Due to development of information and communication technologies our society has become "High-tech Society". At present almost all decisions in all sectors of society are based on electronic information. Teaching profession is not untouched; it has been rapidly expanding its domain with the incorporation of ICT to assure quality in its transaction processes. National Curriculum Framework (NCF-2005), "ICT is an important tool for bridging social divides. ICT should be used in such a way that it becomes an opportunity equalizer by providing information communication and computing resources in remote areas". ICT literacy benefit teaching-learning process and it produce important change in all areas of social and cultural life of everyone. Teachers play an important role in bringing the revolutionary changes in society through ICT literacy. ICT literacy means the capability of using digital technology, communications tools and networks to access, manage, integrate, evaluate, create and communicate information with other people. ICT literacy among student teachers means the teacher have the cognitive and technical skill of using digital technology for the effectiveness of transaction process in classroom as well as outside the classroom. The NCTE has made ICT literacy a compulsory component of the secondary pre-service teacher education programme. This includes ICT literacy and the experience of preparing lesson plans in multimedia, accessing offline and on-line resources, document creation and communication using e-mail, etc.

The UNESCO (2002) document "Information and Communication Technologies in Teacher Education. A Planning Guide" states the importance of ICT in teacher education as follows:

"With the emerging new technologies, the teaching profession is evolving from an emphasis on teacher-centered, lecture-based instruction to student centered, interactive learning environments. Designing and implementing successful ICT-enabled teacher education programmes is the key to fundamental, wide- ranging educational reforms. Teacher education institutions may either assume leadership role in the transformation of education or be left behind in the swirl of rapid technological change. For education to reap the full benefits of ICT in learning, it is essential that pre-service and in-service teachers have basic ICT skills and competencies. Teacher education instititutions and programmes must be

model in the new pedagogies and tools for learning. They must also provide leadership in determining how the new technologies can best be used in the context of culture, needs and economic conditions within their country."

The above passage conveys the vital need of ICT literacy in student teachers. It is very necessary for prospective teachers; they should know when ICT should be used and when it should not be used in classroom. They should know how to use ICT in teaching their subject for the whole class. ICT literacy have some components, mainly they are:

- **1. Access:** ability to know how to collect information from digital sources.
- **2. Manage:** should be able to manage the information, organising and storing information for retrieval and reuse.
- **3. Integrate:** should be capable of synthesize, summarize, and compare information from multiple digital sources.
- **4. Evaluate:** check the relevance and usefulness of information.
- **5. Create:** Generating information by adapting and applying suitable methods.
- **6. Communicate:** should be able to communicate information properly according to diverse needs of the learners.

On the basis of above background researcher wanted to know the level of ICT literacy of student teachers and difference of level of ICT literacy between student teachers of Govt and Private teacher training institution of Hyderabad city.

Objectives of the study:

- (1) To know the level of ICT literacy of student teachers of govt and private teacher training institution of Hyderabad city.
- (2) To compare the ICT literacy of:

(i) Govt and Private Institution student teachers. (ii) Govt and Private Institution male student teachers. (iii) Govt and Private Institution female student teachers. (iv) Govt. female and private male student teachers. (v) Govt. male and private female student teachers.

Hypothesis of the study:

(1) There is no significant difference between ICT literacy of Govt and Private Institution student teachers.

- (2) There is no significant difference between ICT literacy of Govt and Private Institution male student teachers.
- (3) There is no significant difference between ICT literacy of Govt and Private Institution female student teachers.
- (4) There is no significant difference between ICT literacy of Govt. female and private male student teachers.
- There is no significant difference between ICT literacy of Govt. male and Private female student teachers.

Design of the study: Sample:

For the present study the survey type descriptive research method was adopted. Stratified random sampling procedure was adopted to draw out the sample of the study. As first strata, type of teacher training college was selected. Researcher considered two teacher training college from Government and two from Private College of the Hyderabad City Gender of the student teachers considered as the second strata. Total 200 students (100 Govt. and 100 Private) are taken as the sample. The size of the sample was 200 student teachers.

Tool:

For measuring ICT literacy of student teachers, researcher used "ICT literacy scale" which was self prepared. This scale consists of 40 statements. Reliability of ICT literacy tool was calculated by split-halves method. After the collection of data, the scoring was done, according to the scoring procedure of tool.

Statistical Techniques used:

't' test was used for analysis of data.

Results and Discussion:

The level or status of ICT literacy is 67.9 % in the sample of 200 student teachers of govt and private teacher training institution of Hyderabad city.

Table-1 Showing the comparison of means of scores of ICT literacy of different groups of student teachers.

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Group No.	Group	Ν	Mean	S.D	t-value
1.	Govt s.t Private s.t	100 100	30.21 34.82	6.23	5.06
2.	Govt male s.t Private male s.t	50 50	32.23	6.01	3.02
3.	Govt. female s.t Private female s.t	50 50	28.23	5.83	3.28
4.	Govt. female s.t Private male s.t	50 50	28.23	5.72	3.44
5.	Govt. male s.t Private female s.t	50 50	28.69 30.43	6.01 5.83	1.47

s.t = student teachers.

Results and Discussion:

It is clear from an analysis of ICT literacy scores that all the groups of Govt. and Private student teachers differ significantly in their ICT literacy scores except government male student teachers and private female student teachers. Student teachers of private teacher institution are found better than the Student teachers of government teacher institution in ICT Scores. As shown in table no. 1 the 't' value for ICT literacy scores of all sub groups of Govt. student teachers and Private institution teacher trainees are higher than the table value at 0.05 and 0.01 level of significance, except the 't' value of government male student teachers and private female student teachers. Therefore all the four null hypothesis of the study is rejected and last fifth hypothesis is accepted. Thus it can be inferred that student teachers who are studying in

government teacher training institution and who are studying in private teacher training institution have different level of ICT literacy. The findings reveals that the ICT literacy among student teachers of govt. teacher training institutions are not well, their lower level of ICT literacy might be influenced by the presence of various factors like unavailability of computers in colleges and schools, lack of practical knowledge of computers, lack of well qualified computer teachers in teaching field, lack of experiences related to deal with computer in daily routine life.

Male student teachers of private teacher training institution and government teacher training institution have better level of ICT literacy than their female counterparts; it may be due to the more exposure of male in high- tech society. They are more familiar with technology because they have to deal the transactions takes place in different fields.

Educational implications:

In researcher point of view, collective efforts by the researchers, policymakers, teachers in the field of ICT literacy will have tremendous impacts on increasing the level of ICT literacy among student teachers as well as among all the members of the society. So the policy planners, curriculum planners, management of the school and colleges, senior teachers should keep following things in their minds-

- To successfully use of ICT in teaching, student teachers should know how to access the various services available through the internet.
- In Government Institution, necessary support, infra structure and training facilities are the important components for increasing ICT literacy.
- Good knowledge of the internet allows to assist students in their class activities
- Organization of various training courses related to ICT in institution also increases the ICT literacy in all.
- ICT should be taken as a compulsory subject in teacher training courses.
- Use of internet enhances the learning outcomes of learning, it also enhances the effectiveness of teaching.
- Training should be given to student teachers, to use the computers for making presentations, reports and assignments.
- Awareness should be inculcated for various issues of computer problems.
- Computer phobia should be removed from the student's mind and make they should understand that, it is not too hard to work on it.
- Teachers should provide opportunities for practical usage of computer, if they identify that there are some computer phobic students then remedial classes should be arranged.
- College administrators and selection committee of staff should appoint well qualified computer teachers in teacher training colleges.
- Motivate the students and create awareness of computer literacy through giving some better examples related to computer literacy or by organizing campaign.
- Practical usage of Internet, E-mail, M.S Word, Excel, Power point should be provided in classroom.

In a nut-shell, there is a need to increase the level of ICT literacy among student teachers to full fill the challenges of globalized world.

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