ICT in Teacher Education Need of the Hour

Dr. Shakuntla Devi

Former Principal

Sant Roshan Lal College Of Education Woman, Dhani Mahu (Bhiwani), Haryana, India

Abstract:- ICTs are potentially powerful tools for extending Education opportunities. Students must develop not only fundamental computer skills but also proficiency in using a variety of technology tools. Teachers need to improve knowledge and skills to enhance, improve and explore their teaching practice. ICTs in the classroom has been to better prepare the current generation of students for a workplace where ICTs particularly computers, Internet & related technologies are becoming more and more evergreen and found everywhere.

Keywords:- ICT, Educators, Teachers, Teaching Practice, Overhead Projectors, Technical competencies.

I. INTRODUCTION

As we know ICTs stand for Information and Communication Technologies, in developing countries ICTs have the potential for increasing access to and improving the relevance and quality of education. It thus represents a potentially equalizing strategy for developing countries.

ICTs greatly facilitate the acquisition and absorption of knowledge, offering the developing countries unprecedented opportunities to improve and enhance Educational System, improve policy formulation and execution, and widen the range of opportunities for business and the poor. One of the greatest hardships endured by the poor, and by many other who live in the poorest countries is their sense of isolation.

ICTs are potentially powerful tools for extending Education opportunities.

- *Student Technology Competencies:-*

In 21st Century, students must develop not only fundamental computer skills but also proficiency in using a variety of technological tools to solve problem, make informed decisions, and generate new knowledge. Achieving this is the responsibility of the schools and their instructional staff as well yet many of 'Teachers Educators' lacks the required Technical skills and leadership qualities necessary in the integration of Technology into Indian- Classrooms.

- *A Teacher Or Pupil Teacher May Make Use Of Ict In Education At Any Time, And Any Where: -*

ICTs make possible a synchronous learning, or learning characterized by a time-lag between the delivery of instructions and its reception by the respective learner. For example, online course material may be accessible 24hours a day, 7days a week.

- *Teacher Technology Competencies*

Teachers need to improve their knowledge and skills to enhance, improve and explore their teaching practice. Many of the studies on competencies of teachers focus on the teaching role of teachers in the classrooms rather than teachers competencies. Competencies are defined as the set of knowledge, skills and experience necessary for ones' profession and future also.

ICT Competencies are based on using tools & technical equipment for transferring the knowledge to learners. ICT competency is equally important to improve the communication in teaching learning process.

II. IMPORTANCE OF ICT COMPETENCIES FOR TEACHERS & LEARNERS

ICT competencies are important for teachers as well as learners also.

A. Access To Remote Learning Resources

Teachers and learners no longer have to rely solely on printed books. With the Internet and World Wide Web, a wreath of learning materials in almost every subject and in a variety of media can now be accessed from anywhere at any time of the day and by an unlimited number of people.

One of the most commonly cited reasons for using ICTs in the Indian classroom depending upon better preparation of the current generation of students for a workplace where ICTs particularly computers, Internet & related technologies are becoming more and more evergreen and found everywhere.

ICTs can enhance the quality of Education (Teaching & Learning) in several ways

- By increasing learner's motivation and engagement.

- By facilitating the acquisition of basic skills.
- By enhancing more practice through ICT on the part of pupils teacher during their training.
- By using advanced technical gadgets in Educational process of Teaching & Learning such as Teaching machines, Epidiascopes, Overhead Projectors, LCD Projectors etc.

B. *Using Effective Online Search Strategies*

In student's professional preparation as well as in their classroom assignments the teacher chooses the most appropriate research tools and databases and applies the most effective search techniques to produce useful and safe online resources in the classroom.

C. *Organizing Information Graphically*

Teaching Professionals can use specialized graphic organizer programs as well as general tools such as word processors and presentational slides to create digital representations of educational information.

D. *Analyzing Quantitative Data*

This includes administrative work such as putting student's test scores into a spreadsheet and analyzing them as well as preparing curriculum materials with digital tables and graphs of curriculum content.

E. *Relevance Of Ict In B.Ed./D.Ed Courses*

ICTs compose a quite relevant field of the syllabi of 'teacher- education' at both levels i.e. Pre- service & In-service. Today, in modern times, the application of new digital technology is more common. This is a great challenge, partly because of the multiplicity and complexity of new technologies that are constantly exceeding the traditional limits of pedagogy and partly because no one can know which of these technologies will prevail in education in the near future. Technology can be found a valid application in education. Responsibility for "Sound use" of these new tools lies surely on the shoulders of Teacher Educators, Policy makers & Policy Planners, Uncommon Teachers of the Society and respective administrators indeed. Various Universities of India & Boards of Education introduced and made ICT compulsory in the present course meant for Educational Courses such as M.A/ M.Ed. B.Ed. & D.Ed./D. El. Ed. etc

III. LIMITATIONS OF ICT

In spite of merits of ICT, there are a number of lacunas and gaps with ICT and its use which are given as under

A. *Job losses*

Dependence on Technology in an organization, company or business, reduces the number of hours of human intervention. This may even result in people losing their jobs because technology is doing it for them. However this is beneficial for the organization as their profit is increased as they don't need to pay their workers as much as desired because they aren't required as much.

B. *Faults in software (bugs or badly designed programs) can cause chaos*

Faults in software may mean the new system does not work as planned, which may lead to chaos, loss of customers and low employee morale;

C. *Information overload (e.g. people can be flooded with Email)*

Managers may be simply overloaded with information. It is not uncommon for an individual in an organisation to receive several hundred E-mails in the space of a week. If he or she goes away for a week's holiday, it can be almost impossible to catch up with the backlog.

D. *Loss of communication skills*

with the ever increasing variety of social networking sites such as Facebook and Twitter, a lot of people are worried that traditional communication skills will be lost. This worry is particularly about children who often found engaged in these websites because communication and interactive skills are not important with computers.

E. *Dependent on Electricity*

We are completely dependent on electricity for use ICT tools. Electricity round the clock may not be possible always. In this way ,a planned program to teach or demonstrate may be dissolved due to failure of electricity or due to lack of alternate source of electricity available there especially in rural and remote areas of the region.

F. *Computer crime (hacking, viruses)*

Computer crime involves an illegal activity. Hacking is defined as unauthorized access to data held on a computer system. Hacking is often perpetrated by employee of a company who have acquired inside knowledge of particular user Id & password.

G. *Lack of hardware and software standards*

Software is now covered by the copyright, design&Patent Act of 1988 which covers a wide range of intellectual property? In rural & remote areas the facility of hardware & software is not appropriate & update as found in experience.

IV. CONCLUSION

In a nutshell, ICT in Teacher Education is used to transmit, store, create and share ideas, tasks and educate Pupil Teachers (PTs) more effectively. ICT plays an important role in motivating its learners and encouraging them to engage in specific tasks like programming and other aspects to teacher education also. A person from remote area or village can also

refer the latest information and research respectively. LCD projector, OHP and television broadcasts can be helpful in best communication of media to teacher education and pre-service and in-service training. A number of human mistakes can be avoided by online system of evaluation and examination. It ensures lifelong learning and learners can assess their teaching material from any corner of the world and they may consult many educational experts through video conferencing etc. In this way Teacher competencies can be improved by the usage of ICT.

Last but not least, we interpret that teacher competencies can be enhanced and improved to a great extent through the worthy use of ICT in contemporary period in the state and elsewhere. More acquisition of knowledge is not enough for the teacher rather a teacher should have a complete access and mastery over the Knowledge Getting Process i.e. ICT.

REFERENCE

[1] Principal, St.Joseph College of Education, Kadamboduvalvu, Nonguneri627108

[2] Asst.Prof of Economics, St. Joseph College of Education, Kadamboduvalvu, Nonguneri

[3] Singh,A., "Modern Approach to, Teaching of Computer Science", College of Education, Jalandhar, Modern Publishers

[4] Roshan Mani, SRL College of Education, Dhani Mahu, Bhiwani, Published Magzine 2012-2013 page 61.

Lawrence A.S Arul and Veena.K, "Improving Teacher Competency Through ICT"