

Integration of ICT with Teaching Learning process for teachers

Manju Joon

Assistant Professor, Ganga Institute of Education Kablana Jhajjar 124104 Haryana India

E Mail: manjujoon11@gmail.com,

Dr.. Sarika Sharma,

Principal, Ganga Institute of Education Kablana Jhajjar 124104 Haryana India

E Maill: drsarikaipu@yahoo.co.in

Abstract

The present age is the age of knowledge explosion as well as information and communication technology. No educational institution can afford now to remain ignorant from the use of ICT in managing the affairs of education on its campus. In today's era of knowledge explosion and fastly changing ICT, even the teacher sometimes find it difficult to cope up with the intellectual challenges being thrown up by the changed global and local context. Therefore they need to acquire new knowledge and reliable as well as authentic information which could only be possible through integrating ICT with teaching-learning process for teachers.

ICT have enough potential in preparing the teachers for meeting the multi-dimensional challenges and responsibilities to be filled by them. It is therefore very essential that teachers must equip them with the need competencies of ICT for handling their responsibilities properly. Here, in the present paper the author assumes that the teacher education system empowered and integrated by ICT driven facilities can have a great opportunity to come up to the top most heights and a knowledge based society can be surely framed ensuring academic excellence, quality instruction and developing good leaders. " For India to emerge as a super power of the world in the shortest possible time it is important to convert our demographic merit into knowledge power hose by nourishing and uplifting our working population into knowledge enabled working population"

-Mission Document NMECIT MHRD(2007)

Introduction

The future of the nation lies in the hands of the teachers . It shows the importance of the teacher. Teacher is considered to be the architect of the nation. In the present scenario, teachers need to help their students in: how to learn, how to grow in future, how to develop study skills, how to conduct fundamental research etc. and if the teacher really want to survive in the ICT savy world of education he should be aware of he new technology skills. There is a great paucity of such a competent and skilled teacher who can use and integrate right technology in an appropriate manner for the effective integration of ICT in the behavior of their students.

According to Verma(2010),” a teacher plays an important role not only in classroom teaching –learning process but also in society.” Society gives a respectable place to teachers who are really perspective empowered. This empowerment is not at in terms of physical perspective. It is in academic, intellectual, social and national perspectives.

Reason for integrating ICT with Teacher Education

One can easily realize how important education is which makes one a teacher. Various educational agencies are involved in the systematic operation of teacher education. Various education commissions and a number of expert committee have discussed the aims of teacher education in India. But these, traditional vs. modern methods of teaching, outdated knowledge and information and lack of skills, teachers attitude , aptitude and authenticity of their sources of knowledge are some of the other core issues. One of the most commonly reason for using ICT in education has been to prepare the current generation of teachers so talented and efficient to be able to tackle the difficulties of new intellectual challenges which are being thrown up by the changed global and local context.

Technological literacy or the ability to use ICT is to promote the acquisition shift to a learner centered environment. Rom political point of view all our citizens must have the necessary skills. Hence the teacher should know and understand the importance of ICT.

ICT has changed the dynamics of various trades as well as influenced the interest of people and their work in the society. ICT has the potential to reason the barriers that are causing the problems of low ratios of literates in our country. It can be used as a tool to overcome the various problems of education like less number of teachers, poor quality of education as well as to overcome time and distance.

Objectives Fulfilled by ICT in the 21st Century in special context of teacher education

- ICT fulfills the need of learners by providing items and packages of higher standard and interest.
- To support teacher development.
- It provides a kind of control over the learning environment of the pupil teachers and they experience learning from their failures and practices.
- ICT facilitates the learner to have control on lesson, pace the sequence, content, feedback which in turn enhances the efficiency of learning.
- Develops the ability of self-learning and interacting individually, as the learner attains vast experiences: effectively and efficiently.
- ICT empowered simulated situation minimizes dangers in the real world.
- It is interactive in nature and creates motivation and interest among the learners, in turn meeting the individual unique needs effectively and efficiently.
- To provide access to information and communication outside the classroom, eg.-video conferencing with students in other countries, using the internet etc.

ICT – A Technological Wave in Education

Motivate to learn:- various studies indicate that teachers who integrate technology in their classrooms not only motivate their students to learn but help their students to acquire significant skills in the process. If the instructors use technology in the classroom properly, no doubt, it will surely reinforce higher cognitive skills among the learners. They must realize that to enhance the teaching methods instructors must blend multimedia with their teachings in order to gain students attention.

The promise of multimedia is simple; learners enjoy learning by using ICT. It assists students to learn more deeply and above all enjoy such a learning environment.

➤ Facilitates the acquisition of basic skills

ICT enhances and facilitates the basic skills and concepts of the learners which acts as the foundation of higher order thinking skills and creativity. These skills can be facilitated by ICT through drill and practice. It enables greater learner autonomy by unlocking hidden potential for

those with communication difficulties. ICT enables the students to demonstrate achievement in ways which might not be possible with traditional methods.

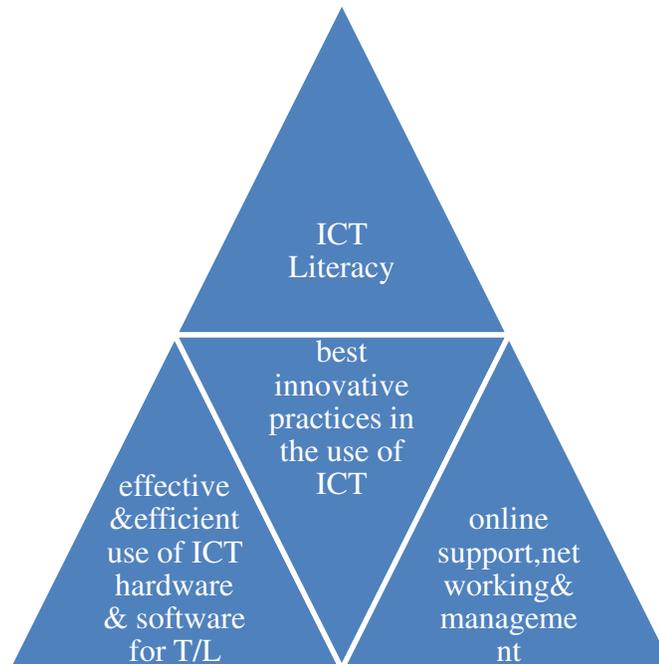
- Enhances Teacher Training

Institutions like the Cyber Teacher Training Center (CTTC) in South Korea are taking advantages of the internet to provide better teacher professional development opportunities to in-service teachers. The government funded CTTC offers self-directed, self-paced, web-based courses for primary and secondary school teachers. IGNOU's satellite-based one-way video and two-way audio- conferencing was held in 1996, supplemented by print-materials and recorded video, to train 910 primary school teachers and facilitators from 20 district training institutes in Karnataka state. The teachers interacted with remote lecturers by telephone and fax.

Impact on Teachers and Teaching Methodologies

- Teachers become multifacilitators
- Teachers using ICT can plan and prepare lessons more efficiently and more effectively
- Helps to promote interdisciplinary approach
- Teaching- learning become more result oriented
- Helps the teachers in guiding the students need and explore in the learning process
- Develop effective teaching tools and designing of the modules

Four Phases for Effective use of ICT



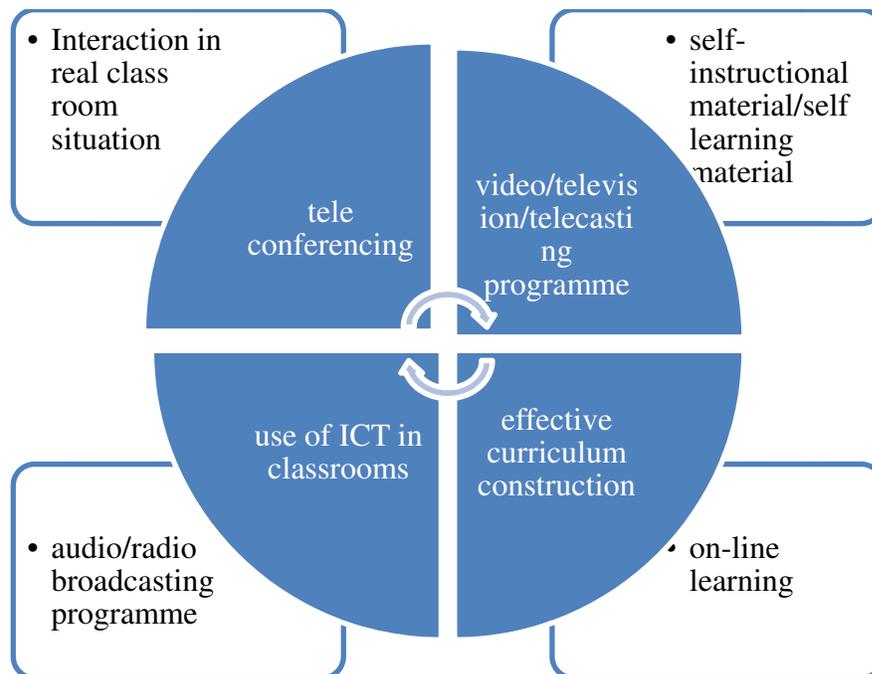
Benefits of ICT in Teaching-Learning Process

- Enables greater learner autonomy
- Upbrings hidden potential for those with communication difficulties.
- Enables tasks to be tailored to suit individual skills and abilities.
- Computers can improve independent access for students to education.
- Students with special educational needs are able to accomplish tasks working at their own pace.
- Students with profound and multiple learning difficulties can communicate more easily.
- Reduces isolation of teachers working in special educational needs by enabling them to communicate electronically with colleagues.
- Improve skills of staff and a greater understanding of access technology used for students.

- Enhancing professional development and the effectiveness of the use of ICT with students through collaboration with peers.
- Improves efficiency in teaching-learning
- Increases motivation
- Active participation of student
- Better learning, retention and student performance
- Multi-sensory learning experience

ICT is a powerful new development with ambitious role in teacher education. Digital and Internet based multimedia transforms the present trend in the field. It takes just a computer to play multitude of media enabled programs and packages.

PARTS OF ICT



Conclusion

The teacher education system empowered by ICT driven infrastructure can have a great opportunity to come up to the centre stage and ensure academic excellence, quality instruction and leadership in a knowledge based society. ICT has revolutionized the entire concept of education, learning and research by offering new opportunities and challenges in creation and dissemination of information by way of Web TV'S, Net PC's and Web-based education independent of time, pace and place. It is really a challenging task to strengthen ICT in teacher education institutions because a large majority of the teacher education institutions are unequipped or under equipped in the terms of digitized and high-tech infrastructure.

References

1. Ashton, P. (1985). Motivation and the teacher's sense of efficacy. In C. Ames, & R.
 2. Ames (Eds.), Research on motivation in education, 2 ,141-171. Orlando, FL: Academic
 3. Press Inc.
 4. Bandalos, D. and Benson, J.(1990). "Testing the factor structure invariance of a
 5. computer attitude scale over two grouping conditions", Educational Psychology
 6. Measurement, 50,49-60.
 7. Hakkinen, P. (1994). Changes in computer anxiety in a required computer course.
 8. Journal of Research on Computing in Education, 27(2), 141-153.
 9. Key,R.H.(1990). Predicting student teacher commiment to the use of computers,
 10. Journal of Educational Computing Reasearch, 6, 299-309.
-