### ROLE OF ICT AS INNOVATIVE AGENT IN TEACHER EDUCATION IN GLOBAL PERSPECTIVE

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#### ABSTRACT

Information and communication technology (ICT) is a force that has changed many aspects of the way we live. If one was to compare such fields as medicine, tourism, travel business, law, banking, engineering and architecture, the role of ICT across the past two decades has been enormous. As we move into the 21<sup>st</sup> century, these factors and many others are bringing strong forces to bear on the adoption of ICTs in education and contemporary trends suggests we will soon see large scale changes in the way education is planned and delivered as a consequences of the opportunities and affordances of ICT. This paper seeks to explore the roles we will see in education as ICT acts as a powerful agent to change many of educational practices to which we have become accustomed.

Keyword: ICT, Infocom Technology, Internet, Teacher education.

#### **INTRODUCTION**

Reorganizing this potential of education, empowerment through teacher education has a crucial role to play for overhauling restructuring and modernizing its input process to get the output in the form of quality oriented teaching using Information Communication Technology in various modes like: Print medium, radio, tape recorder, telephone, mobile, television, overhead projector, epidiascope, film projector, LCD projector, digital camera, video, computer and various other computer assisted technologies. The decline in quality of teacher education can be ascribe due to lack of use of modern techniques of Information Communication Technology, lack of trained staff in information communication technology to train the teachers. Modem world needs, not just competent teacher but teachers who are affective teacher and have multiple sequence and are able to envisage new forms of professionalism. The basic mission of teacher education system should be viewed in terms of indispensable demands of society, characterized by democratic value, high demands of learning of science and technology including information Communication Technology which is felt need of society and flexibility to cope with inevitable socioeconomic changes. It is right time for all of us to establish quality input norms, process norms and

output norms for different teacher programs which would help us to produce effective professional teachers.

#### II. USE AND INCLUSION OF INFORMATION COMMUNICATION TECHNOLOGY IN TEACHER EDUCATION

We are right on front edge of an information technology revolution, one that is going to shake the worlds of work and of organizations right down to their most fundamental definitions. Today we have an amazing collection of new information gadgetry to work with. All of these are changing our access to and use of information.

Generally three phases are identified for implementation of Information Communication Technology content in teacher education programs. The following phases are cited below:

1. Information Communication Technology Literacy: It means having the skills, knowledge and attitudes to use Information Communication Technology to maximum advantage and in other words we can say information communication technology literacy means that a person can contribute more effectively to their own well-being and be a more effective teacher, entrepreneur, consumer and worker.

2. The effective and efficient use of Information

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**Communication Technology:** Hardware and Software for teaching learning activities.

#### 3. Pedagogy based Information Communication

**Technology:** Use of integration of information communication technology in subject content, teaching, online support networking and management.

# III. THE TECHNOLOGICAL PERSONALITY OF 21ST CENTURY

A system of education is closely woven into the fabric of the society within which it operates. Before examine new ways to train teachers, we might do well to anticipate some characteristics of the society within which the teachers are trained. We realize seven features of the coming century that will have challenges for future pupil teacher.

| Information : Proliferating

- + Technological development : Multidisciplinary
- | Markets : Globalized
- | The environment : Endangered

| Social responsibility : Emerging

| Corporate structures : Participatory

| Change: Rapid

When we can say about the individuals needed to function as teachers in the society whose technological characteristic, we have just outlined? The profiles may be conveniently sketched in terms of three components:

(1) Their knowledge the facts they know and concepts they understand;

(2) The skills they use in managing and applying their knowledge, such as computation, experimentation, analysis/ synthesis design, evaluation, communication, learship and team work;

(3) The attitudes that dictate the goals toward which their skills and knowledge will be directed-personal values, concepts, preferences and biases. Knowledge is the database of teachers. Skills are the tools, used to manipulate knowledge in order to meet a goal dictated or strongly influenced by the attitudes.

#### I. INFOCOM TECHNOLOGY IN SCHOOLS

(i) It is generally agreed that Infocom Technology is a crucial resource in education.

(ii) Children use computers from an early age and continue to university level.

(iii) Children taught practical Infocom Technology skills that are transferable into the work place.

**II. ADVANTAGES OF USING THE INTERNET IN SCHOOLS** 

i. A cheap, fast way to access a huge amount of

resources that are regularly updated.

ii. Encourages computer literacy, helpful in an increasingly technologically orientated world.

iii. Teachers upload course documents so that students misses a lesson, they can download information and do the work in their own time.

iv. Government promises high-speed broad band internet access for every university, hospital and doctors' surgery which would allow schools to be linked and to share resources.

## III. DISADVANTAGES OF THE INTERNETIN SCHOOLS

i. Less need for schools i.e. No outside contact, Job losses for teachers, etc. There is a lot of incorrect information on the internet, Students will learn more theory and less practical.

ii.Being taught the wrong things like Hacking, Creating Viruses, and Plagiarism.

iii. A lot of distractions like Porn, Games, Music and Videos.

#### IV. ADVANTAGES OF INFOCOM TECHNOLOGYINSCHOOLS

i. Use of packages: Word-processing, DTP, spreadsheets.

ii. Special facilities for pupils with disabilities.

iii. Teacher and pupil communications improve.

iv. Infocom Technology provides links with other schools or with business.

v. Computers in schools provides wider access to Infocom Technology and encourages new ways of learning.

(vi) We can repeat work again and again.

#### V. DISADVANTAGES OF INFOCOM TECHNOLOGYINSCHOOLS

i. Infocom Technology is very expensive not all students get the same opportunities.

ii. It can be boring sitting in front of a computer for a long time.

iii. Computers cannot interact on a personal level e. g., fuller explanation.

iv. It becomes harder for the teachers to organize the teaching of new concepts.

# VI. WILL COMPUTERS REPLACE TEACHERS?

i. Children lose social interaction.

ii. Working on computers all day-bad for your health.

iii. Computers aren't as reliable as teachers.

iv. Computers can't explain new concepts but a good teacher can explain.

v. It left to learn at their own speed, many students would fail behind.

vi. Computers don't have the motivating force that teachers have.

#### **VII. CONCLUSION**

The teacher education is undergoing rapid changes in keeping pace with the demands of learning and expectations of learners, Communication and society as a whole using innovative Information Communication skills. Various efforts have been made to improve teacher education but gaps can still be seen. Teacher education must aim to build a national system of Teacher education based on professional ethics, and continuity.

• It should facilitate the realization of the constitutional goals and emergence of the new social order.

• It should prepare professionally competent teachers using Information Communication Technology to perform their roles effectively as per needs of the society.

The Teacher Education is a continuous process where in both Pre and In-service education has to be well integrated for making teachers effective. Teacher Education is to ensure high proficiency and Quality of school education. If the teachers are to act as trail blazes in the lives of learners and also in the educational process for development, they have to acquire professional competences commitment and need to be empowered to perform their multiple skills in the classroom school and community. Information Communication Technology will help in promoting in sound teacher performance and high quality learning among student in cognitive, affective and psychomotor areas of human development. The paper has been sought to explore the quality of teacher education in the light of Information Communication Technology. Quality teacher education is essential and it must be met for successful teacher education and provide guidelines for the development of strategic planning process. Educational Institutions are the training centers for leadership in all walks of life. The main concern of T.E. is to build teacher capability using information Communication Technology skills to translate curriculum intents for children to enable them to acquire the desired knowledge skills and aptitude. To sum up, the dream of quality teacher education at all levels can become a reality only when the quality of inputs and training techniques including information Communication Technology Skills in teacher education is adopted by teachers to make teaching effective.

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