NECESSITY TRENDS IN ICT FOR EDUCATION & TRAINING

Dr. Kamendu R. Thakar[1], Dr. Dipika R. Chaudhari[2]

[1]*Dr. Kamendu R. Thakar, Assistant Professor, Smt. S. I. Patel Ipcowala College of Education, Petlad, Gujarat, India*
[2]*Dr. Dipika R. Chaudhari, Assistant Professor, Smt. S. I. Patel Ipcowala College of Education, Petlad, Gujarat, India*

ABSTRACT

"ICT," an abbreviation for information and communication technology, refers to all equipment, applications and services that involve communication. Computers, cell phones, televisions, radios and satellite systems are all part of ICT.The integration of computers and communications offers opportunities to the education systems with its capacity to integrate, enhance and interact with each other over a wide geographic distance in a meaningful way to achieve the learning objectives. Not only mastering ICT skills, but also utilizing ICT to improve teaching and learning is important for teachers in performing their role of creators of pedagogical atmosphere. We will have to make use of the rich and exciting opportunities offered by the new technologies in education to reach our new goal and vision.

The aim and objectives of ICT implementation in education are: To implement the principle of life-long learning / education, To increase a variety of educational services and medium / method, To promote equal opportunities to obtain education and information, To develop a system of collecting and disseminating educational information, To promote technology literacy of all citizens, especially for students, To develop distance education with national contents, To promote the culture of learning at school (development of learning skills, expansion of optional education, open source of education, etc.), To promote the culture of learning at school (development of learning skills, expansion of optional education, open source of education, etc.)

The major hallmark of this learning transition is from teacher centered to learner focus paradigm. During the last three decades, the changes in educational environment have been phenomenal. The role of the teachers will change from knowledge transmitter to that of facilitator, knowledge navigator and sometime as co-learner. The new role of teachers demands a new way of thinking and understanding of the new vision of learning process. Learners will have more responsibilities of their own learning as they seek out, find, synthesize, and share their knowledge with others.

1 INTRODUCTION

During the past few years, the world has witnessed a phenomenal growth in information and communication technology, computer network and information technology. Development of new broadband communication services and convergence of telecommunication with computers have created numerous possibilities to use a variety of new technology tools for teaching and learning process. The integration of computers and communications offers opportunities to the education systems with its capacity to integrate enhance and interact with each other over a wide geographic distance in a meaningful way to achieve the learning objectives. The growth of these communication and computer systems, their ease of use, the power and diversity of information transfer allow teachers and students to have access to a world beyond the classroom

Not only mastering ICT skills, but also utilizing ICT to improve teaching and learning is of utmost importance for teachers in performing their role of creators of pedagogical atmosphere. While literature provides some evidence of the effectiveness of using ICT in technical considerations, little is known about which learning strategies and pedagogical framework should be used for education and training. How to construct these

electronic teaching and learning atmosphere so that they are based on specific epistemologies or knowledge bases? What will be the new vision and guiding principles of teacher development for pedagogy-technology integration? As we become increasingly supported by ICT, teaching and learning will not be the same as before. We will have to make use of the rich and exciting opportunities offered by the new technologies in education to reach our new goal and vision. To appreciate the integration of ICT in teaching and learning, we need to understand the major paradigm shifts in education in recent years.

2 PARADIGM SHIFTS

Major paradigm shifts in educational practices of teaching and learning under the ICT based teaching learning system. Whereas learning through facts and practices, rules and procedures was more adaptive in earlier days, learning through projects and problems, inquiry and design, discovery and invention, creativity and diversity, action and reflection is perhaps more fitting for the present times. The major hallmark of this learning transition is from teacher centered to learner focus paradigm. During the last three decades, the changes in educational environment have been phenomenal. The model, focus, role of the learner and technology has been changed drastically from traditional instruction to virtual learning as below.

MODEL	ROLE OF LEARNER	FOCUS	TECHNOLOGY
Traditional	Passive	Teachers	Chalk & Talk
Knowledge	Adaptive	Group	Pc+ Network
Information	Active	Learners	Personal Computer

Shifting the emphasis from teaching to learning can create a more interactive and engaging learning environment for teachers and learners. This new environment also involves a change in roles of both teachers and learners. The role of the teachers will change from knowledge transmitter to that of facilitator, knowledge navigator and sometime as co-learner. The new role of teachers demands a new way of thinking and understanding of the new vision of learning process. Learners will have more responsibilities of their own learning as they seek out, find, synthesize, and share their knowledge with others ICT provides powerful tools to support the shift from teacher centered to learner centered paradigm and new roles of teacher, learner, curricula and new media. The major shifts have been given below:

Changes in Teachers' Roles	
Learning to use ICT	Using ICT to Enhance Learning
Expository	Interactive/Experiential/Exploratory
Transmitter of Knowledge	Guide & Facilitator of Knowledge
Controller of Learning	Creator of Learning Environment
Always Expert	Collaborator & Co-learner

All this change taking place in learning and teaching, demands a new learning environment to effectively harness of the power of ICT to improve learning. ICT has the potential to transform the nature of education. where, when, how and the way learning takes place. It will facilitate the emergence of responsible knowledge society emphasizing lifelong learning with meaningful and enjoyable learning experiences.

3 REFERENCES

[1].http://www.slideshare.net/ biotechvictor1950 /integration-of-ict-in-teaching -and-learning

[2].http://www.unevoc.unesco.org/fileadmin/up/emergingtrendsinictforeducation.pdf

[3]. http://legacy.oise.utoronto.ca/research/field-centres/TVC/RossReports/vol7no1.htm

[4]. http://edtechreview.in/trends-insights/insights/959-advantages- of- using-ict-in-learning-teaching-processes

[5]. http://www.iosrjournals.org/iosr-jrme/papers/Vol-1%20Issue-4/B0140308.pdf

[6]. https://www.reference.com/technology/meaning-ict-d11bb87f61c29a70#