# NATIONAL CONFERENCE ON ICT EMPOWERED TEACHING, LEARNING AND EVALUATION (NCICT-2016)

International Journal of Advanced Scientific Technologies in Engineering and Management Sciences (IJASTEMS-ISSN: 2454-356X) Volume.2, Special Issue.1Dec.2016

# NEED FOR ICT IN TEACHING AND LEARNING PROCESS

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Abstract—The paper gives a glimpse of need for ICT in education. There is interlinking between globalization and technology. The technology is slowly creeped in every walk of life in various forms such as mobile phones, tabs, computers wi-fi CCTV cameras etc. The use of ICT is part of every sector existing in the society like banking, insurance, revenue offices, telecommunication sector etc. Hence the knowledge of ICT for an individual is becoming as important as the primary education to. The role of ICT can be understood if it is introduced to the learners from primary levels. This involves two aspects, the first aspect is to teach ICT to teachers and the other is to use ICT as a major tool in teaching methodology. These two aspects will help the learner in acquiring basic skills of ICT. The use of ICT also transforms the teacher centered class room to student centered one. It also expands the access of a learner to a wide knowledge resulting in improved and innovative learning outcomes. ICT has tremendous potential in obtaining more dynamic, modern and integrated society. ICT also has its pros and cons can be very effective when used under effective surveillance.

## Index Terms—CCTV, wi-fi, Knowledge of ICT

#### I. Introduction

This is the age of Information and Communication Technology where it is easy to receive a message in a mobile rather than a letter. The present era can be termed as era of information and communication and technology that leads to globalization. The challenge of 21<sup>st</sup> century for developing countries like India is, preparing their present and future generations for globalization. As per the economists education sector is a long term investment that generates the highest returns than any other avenues.

## II. ENHANCING THE QUALITY OF EDUCATION THROUGH ICT

It's high time we improve the quality of education because the individual performance at work is the direct result of their education. The vital role in the life of a student is played by a teacher in facing the challenges thrown by the society not only socially, economically but also technologically. A person needs creative thinking, adaptability,innovation and entrepreneurship in addition with a qualified degree certificate to withstand today's competition. Technology used in a proper way can be a booster to the quality of education in different ways such as

- a) By motivating the learner and increase their involvement in learning process.
  - b) By boosting the acquisition of basic skills
- c) By shifting the teacher- centered environment to learner- centered one.

The ICT used in teaching and learning process enhance the essence of them thus helping learners to face the present scenarios existing in the world due to globalization. The use of ICT by an individual also helps to increase their self esteem and self- confidence. The inclusion of ICT in teaching and learning process can make high quality education a reality for an individual irrespective of time and geographical barriers. The biggest challenge to the education system is to prepare the individual to face the accelerating pace of technology of the present era. The involvement of teachers along with the up-gradation of the technology in the education sector will help in improving the performance of the students. The ICT tools such as videos, images, power point presentations, e - books, MOOCs, virtual labs etc,. Use of ICT makes the students active learners where as in conventional class room they are passive learners.

A person can remember and understand a picture or a video more easily for a longer time than a paragraph read about a concept. From the study of human brain, researchers found that the sense of vision occupies larger part of brain among other senses. For example, when a gyroscope explained by showing the video of its working gives better idea to learner rather than drawing a picture of it on the board and teaching. The students get motivated by the videos of great people from online websites which helps in building passion towards the learning process of a

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given subject like when the video of astronauts in spaceship was shown to the students in the e – classroom they started asking various questions regarding the gravity topic which was taught by a lecturer in the class room for 12 days with not even a single doubt arising in the conventional class room with a board and a marker. Though Universities, vocational and technical training centres are experimenting with the technology to reach the wide number of students still it requires more innovative methods to fulfill the requirement.

UNESCO has reported in March 2016 that one in five among the world's 650 million people could not read a simple sentence even after attending the school for four years. The quality of education provided is frightful especially in low income countries. However, the rich countries are also required to improve the quality of education provided to the future youth of the world. The worst part of it is that the aging population around the world is increasing by 56% in coming 15 years. By 2030 the number of old people increases the number of children where the burden on each individual youth increases twice which can be handled only through technology.

UNESCO conducted mobile learning week 2016 in Paris, France to bring awareness among the teaching and learning community about the usage of mobile technology in their curriculum of learning which is affordable by even low income countries. Inexpensive smart phones and tablet computers can be termed as portable sources of learning resource. Mobile devices are helpful even for people with disabilities where a audio recording played to visually handicapped gives more sense along with a teacher in the class room.

Globalization resulted in rapid increase in use of ICT in various sectors including education. ICT has been playing a vital role in the eradication of social evils like gender inequality worldwide. Information and Communication technologies can be defined as "diverse set of technological tools and resources used to create, store manage information and communicate" ICT is helping in enhancing the efficient infrastructure in government and corporate offices and completing the required work in hours which was taking days in the absence of ICT.

For instance, the Indira Gandhi National Open University in India has combined the use of recorded video and audio, print radio, television and audio conferencing technologies. The decreasing cost of PCs and desktops is turning out to be a favorable situation for the education sector. The usage of ICT for teaching makes it more meaningful process.

Using ICT in education needs to be dealt with two aspects.

- i) Teaching ICT to teacher and
- ii) Using ICT as a major tool in the teaching methods to teach the learner.

It helps integrating the information into the general activities. The clourful texts, sound and moving images use can engage the students more effectively in the class room. This visual, oral combination integrated with conventional teaching can do wonders in getting the logics to the student in a short span of a time. Haddad and Draxler identified five levels of usage of technology in education presentation, demonstration, drill and practice, interaction and Collaboration. The use of videos is the most effective ICT component in teaching. Multimedia CDs, interactive games, flash and animations, digital story telling slide shows and video books and many other forms of ICT incorporated in to learning process. Use of ICT in education transforms the role of a teacher from dispenser of knowledge to a proactive facilitator. The transformation requires the collaboration of multiple agencies to take place in grassroots of teaching.

The youth should be handled wisely from the addiction of online and multimedia games through internet. The children have large opportunity of browsing the negative and porn sites. Educating the people in ICT can be the effective method of elimination of negative impact of ICT.

#### III. CONCLUSION

The paper is an attempt to understand the effect of ICT in teaching and learning process. The ICT can be a potential source of accelerating, enriching and deepening skills to motivate and engage students in learning process. It helps in creating economic viability for tomorrow from today's experience.

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