# Era of Information and Communication Technologies in Education

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Abstract: Modern era is called "Era of Information and Communication Technologies." ICT means information and communication technologies which provide knowledge through internet, WIFI, wireless networks etc. Technology based education was started in USA in the early 1960's with computers. ICT in India has been taking fast and rapid strides since globalization and privatization. Effective use of ICT has changed the face of education sector and has created new and more opportunities in Human Resource Department (HRD). Administration has become more clear, fast, economical and time saving. Teachers and students have become an integral part of ICT and are well benefited. The purpose of this article is focused on utilization of ICT in education.

**Keywords:** ICT, administration, integral, HRD, globalization.

## 1. Introduction and Literature Survey

The 21<sup>st</sup> century is a witness of tremendous advancement in technology which is growth oriented in every field related to human beings. ICTs have become an integral part of our life.

ICT tools can be used in administration, banking sectors, government and all private sectors [1]. In today's web world, ICT tools are used effectively in every field. The web of ICT starts from home to any sector like policy makers, educationist, government and non government organizations, academics, businessman to common man are increasingly connected with entire new modern face to the world.

The concept of digital learning is increasing across the globe including India; reform has come in education sector. ICT has a great potential to enhance students achievement and teachers teaching. The use of effective modern technologies in education has removed all types of educational boundaries. It has been recognized as revolutionary trends in KG to PG education system. There is an important need to realize the potential of information and communication technologies in quality education [2].

In developing countries like India, ICT provides improved quality of education and provides flexibility to learner by providing remote access to learning material [3]. The modern education system with technological tools guides and facilitates the teachers and students development. ICT plays very crucial role in the education to increase the productive skills and earning power of the society.

Good teaching is not simply adding modern technology to the existing teaching and content domain rather it should cause the representation of new concepts and requires developing sensitivity to the dynamic knowledge [4]. Higher education is the tool to build a knowledge based society for future [5]. It helps in innovating and encouraging students in self learning. India has age old rich culture of teaching and learning. Quality of the education depends on quality of teachers.

## 2. Methodology

This work is done by investigating secondary data like ejournals, research data from website, proceedings etc.

#### Objectives

- Need of ICTs in modern education method.
- Importance of advanced technology in education.
- Advantages of ICTs in education.

Uses of ICTs in education are widespread and are continually growing worldwide. The major advantages of ICTs are self paced and learning is done at learners place.ICT is a driving force for development and innovation in both developed and developing countries [6]. Nation must adopt ICT policy to get benefit from technological aids. To do so, a cadre of professionals has to be educated with sound ICT background. Many countries have adopted ICTs and mastering the basic skills and concepts of it's as a part of day to day life.

**Computer** is based on digital technology. It is an electric device that has capacity to type, store, retrieve, send, and edit, process qualitative and quantitative information in a fast and accurate manner. Computer versions like laptop, tab, can be the part of every office company and home.

**Information technology:** Networking of computers gave birth to IT. Networking is a child of computer. It includes microelectronics and info-electronics. It covers computers, electronic office equipments telecommunication robots, computer controlled machine, electronic devices and software products.

**Information and Communication Technologies:** It has open era of advanced technologies like online learning. All types of information are available on the tip of the finger due to ICT tools, which can be converted into knowledge by the stakeholder. e- Learning: e- Learning is learning by means of electronic gadgets to access information outside the traditional classrooms.

ICT can be used in the augmentation of all the learning domains. Students can access the lecture material as per her or his convenience which brings flexibility in learning especially for those who are working and studying. Accreditation agencies were established in India in 1994 as a measure of quality assurance in order to enhance standards of higher education. NAAC assessment mainly focuses on education quality enhancement.

It is well known that India has second largest system of education in the world after China and USA. 21<sup>st</sup> century can afford transforming model of education with the help of ICTs. Learning is one of the important outcomes of education. Traditional system of classroom teaching still occupies an important part of any educational system in the world including India but now gradually age old system of education is replacing by ICT.

# **3.** Conclusion and Future Scope

In the era of advanced world people are coming closer and closer by means of ICT tools such as internet service provision, computer, telecommunication equipments and services, information technology equipments and services, media and broadcasting, libraries and documentation centers, commercial information providers, network based information service, face book, my space, radio, TV, cell phone, computer, hardware, software, satellite system, WIFI, YouTube, teleconferencing, audio conferencing, email, TV lessons, radio broadcast, interactive radio counseling, audio-video cassettes, CD-ROM, pen drives, internal networks, local area network (LAN) (b), external networks, wide area network (WAN), industrial robot, online learning, e-learning, e-coaching, e-journals, ebooks, presentations, projectors, white board, web based resources, multimedia resources, computer based assessment, virtual university, m-learning, science app Wikipedia, visualize, digital camera, recorder and third generation mobile.

This leads to share knowledge and better understanding among people. By using ICT tools there is no need to visit the place physically. Effective teaching and learning by using ICT devices learners can become better professionals. Application of ICT should be considered in educational institutions by management as a great priority base for administration teachers and students. This will be helpful to survive the institution in the ICT era and also will be helpful to get success in future.

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