



## **PROFESSIONAL DEVELOPMENT OF TEACHER'S IN PRESENT EDUCATIONAL SCENARIO OF ICT**

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### ***Abstract***

*Education plays a significant role in the life of a nation. The character and quality of the people greatly depend on the education that is imparted to them at different levels. Knowledge and wisdom have always been regarded as the highest virtues of man. The present century is undergoing a major revolutionary change where technology has intervened in all aspects of life. Education is no exception to be adversely affected by the intervention of technology and it has also seen many appropriate changes that has brought a totally new look to the concept of education in the modern times. With the technologically advanced world, the teacher should also keep pace and be aware of the new technologies and the way to integrate them in education so as to enhance learning in their students which is the major aim of education. Teachers of all level of education should be able to incorporate new technologies and impart their lessons through latest trends that will affect at the cognitive domain of the learner to a greater extent.*

This is the age of knowledge management where teacher is not only a person or medium to transfer knowledge but teacher acts as a manager to manage properly his content by integrating new technologies in his methodology. Management includes all the aspects from planning to communicate to executing the same concept in a better manner and with a new style every time. Therefore, there is a need to change the definition and demands of the teacher and the learner.

There is a need to educate them so that they get familiar with the new technologies of the market and incorporate them in their teaching to get a holistic approach.

Today's society has accepted new technologies for fast development and progress due to global demand and competition. New technologies like personal computers, World Wide Web, mobile phones, satellites and internet are all helping us in gathering and dissemination of information globally. Higher education is an important form of investment in human resource development. Multimedia technology is found to be a very useful tool in interaction and communication to multi-language, multimedia communities. The growth of colleges from independence to date is 700 to 20,700 and universities from 25 to 435 and student enrolment from 1.00 lack to 1.6 crore.

The exponential growth of institutions is still unable to cope with the demand for education by the country's youth. To achieve the targets set by planning commission 2007 and national knowledge commission, we are bound to use new technologies to impart education to each and every one who desires to have access to higher education.

Researches done in education show that integration of modern technologies in education have the following advantages : it motivates student to learn, improves collaborative learning helps in understanding the subject, helps in collaborate learning, provides greater understanding, improves designing skills, develops critical thinking and helps in social interactions.

Information technology is defined in oxford advanced learner's as the study or use of electronic equipment especially computers for storing, analyzing and handling information and communication technologies in the process of sending, receiving and exchanging information. According to UNESCO 'ICT is a scientific, technological and engineering discipline used in handling information, its application and association with social, economical and cultural matters. With the current technological infrastructure this exchange can occur from anywhere any time without any constraints of time and space.

The relatively recent change from the term information technology (IT) to information and communication technology (ICT) reflects the accelerated pattern in which modern technology has impacted teaching. ICT covers not just computer but any technology involved in communication such as UNESCO defines, 'informatics as the science dealing with the design, realization, evaluation, use and maintenance of information processing systems.

Including hardware, software, organizational and human aspects and the industrial, commercial, governmental and political implications of these. In other words ICT is an umbrella term that includes any communication device like software, CD Rom, the Internet, television and radio, image capturing devices including still and video cameras, sensing, data logging control application, e-content, e-books and multimedia representations.

Thus ICT are the computing and communicating facilities and features that support teaching, learning, and a range of activities in education. It has the essence of transforming information effectively anywhere using the latest modes of technology like computers in synchronous and asynchronous environment that create greater access to information and communication narrow down the gap between the information giants of haves and have not.

Multimedia can mean practically anything from a computer that happens to be equipped with a pair of speakers to a complex program capable of driving a laser disc or DVD players and multiple screens and high frequency quality sound Multimedia especially with a video

projector can provide real impact in a class room as your computer will become a flexible blackboard.

Many researches have proved that ICT integration is a powerful tool, which can be employed for its flexibility, cost effectiveness to achieve various goals of education. The use of ICT has amicably a transformative potential in students, this is still found only in isolated pockets of innovations and is associated with only a few enthusiastic institutions and individuals what do information and communication technologies, specifically computers and the internet, offer that conventional teaching does not?

Each individual is unique with unique needs and a unique way of learning. Each is therefore, entitled to an individualized way of learning.

### **Virtual Classroom: A new approach to learning:**

Virtual classroom is a learning environment created in virtual space. In this environment teachers and students are separated by time and space both. The teachers provides course content through course management, applications multimedia resources, the internet, video conferencing etc. students receive the content and communicate with the teacher via the same technologies.

There are many instruction modes in virtual classroom education that includes virtual classroom, hyper text courses, video based courses, audio based courses, animated courses, web supported textbook courses, peer to peer courses. Electronic media like a discussion forum, chat room, voice mail, e-mail etc. are used for communication. Assignments by students are submitted electronically and when needed tutors, fellow students or a help desk are available and immediately you can receive the feedback via electronic media.

Through this we can improve access to advanced educational experiences and in turn can improve the quality and effectiveness of education even in remote areas of the world by internet. One can interact with specialized teachers, experts, tutors, peer group without attending classes but can feel that one is in a classroom taking lesson from the teacher. We can say with full confidence that virtual classrooms are a manifestation of knowledge and technological revolution.

### **Multimedia:**

Multimedia is one of the fastest growing and most exciting areas in information technology field hundreds and thousands of people are putting together text, pictures, animations, movies, sound, video clips etc. to create multimedia presentations. It is now available to the common man who can use multimedia tools like Microsoft PowerPoint, lotus and freelance

graphics and so on to develop professional presentations. It has variety of usage in entertainment industry, sales presentation, education and training, digital publication electronic reference materials.

### **Changing role of teachers in the era of ICT:**

The changing role of teachers would require certain new skills and competencies. In this new role, they have to manage the technology in the classroom and at the same time enable the learners to make full use of their learning.

Education is a profession and teaching at all levels has acquired a scientific dimension. It has thrown new challenges before teachers updating of knowledge and methodology, acquiring communicative proficiency, designing and applying innovative tools and practices along with an awareness about the societal concerns and a perspective of the present educational scenario are some of the essential requirements for becoming an effective teacher.

The major objective of higher education is creation and dissemination of knowledge. In the era of ICT a mechanism for the professional development of the teacher's modules for pre services and in service training of teachers must be provided by the system on a regular basis. Keeping in view the global scenario and the Indian situation with regard to higher education we can see **the benefits of ICT to teachers.**

- ICT allows engaging and motivating pupils to a great degree.
- The internet increases access to authentic data
- Simulations enable teachers to show experiments that would not otherwise be possible.
- Data logging and digital video recording allow access to new resources of data in a wider range of experimental settings.
- ICT is a quicker and more accurate data collection saving lesson time and give better quality results.
- Teacher can spread the support time more evenly rather than attempting to give all the support to individual student.
- They can set assignments online, view the work submitted by students and can give instant feedback.
- Initiate discussion about topics.
- Provide resources online, such as documents, presentations data or give direct links to website linked to the topics of study.
- It helps in tailoring resources to meet the needs of the students.

### **Concluding remarks**

In this technologically advanced era the teacher cannot remain immune to the increasing technology in the market. They being in the fore front of the society have special duties and responsibilities than any other profession. They being the creative heads of the society need to learn imbibe newer techniques and methodologies so as to increase the retaining , understanding and learning capacity of their students.

The teachers of the new breed should be technologically aware and should posses quality of knowledge management so that they can integrate technology in their pedagogy and can present content in a different style by different teachers and they can manage the whole process of planing Organisation and implementing the content is an integrated approach in appropriate manner. The new trend in education requires well equipped technologically trained teachers and learners to meet the challenges of future education.

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