Development Opportunities for Teachers in the Current ICT Scenario

Dr. Hemlata Kashyap

HOD B.Ed Department
Institute for Education and Technical Sciences
Abupur, Murad Nagar, UP

Abstract- **In the ever-evolving landscape of education, the role of technology, particularly Information and Communication Technology (ICT), has become pivotal. The research paper delves into the transformative impact of ICT on modern teaching and the indispensable need for educators to adapt to these advancements. The paper highlights the profound changes brought about by ICT, enabling collaborative learning, improved comprehension, critical thinking, and enhanced access to information. It explores the concept of the virtual classroom as a revolutionary educational platform, offering diverse modes of instruction and fostering global connectivity. The research also underscores the evolving role of teachers, emphasizing the importance of technological proficiency, knowledge management, and effective communication. In conclusion, the paper asserts that educators must embrace technology and innovative pedagogical strategies to meet the challenges of the future in education, ultimately benefiting both students and society.**

A nation's life is significantly impacted by education. The type of education that is given to people at various levels has a significant impact on their character and quality. The finest qualities of man have traditionally been seen to be knowledge and wisdom. The modern nation is going through a huge transition where technology has gotten involved in every part of existence. Education is not exempt from being negatively impacted by technological interference, and it has undergone several suitable modifications that have given the idea of education in modern times a completely new appearance. The primary goal of education is to improve student learning, thus teachers must stay up with technology advancements and be knowledgeable about new technologies and how to incorporate them into the classroom. Teachers at all levels of education should be able to use new technologies and convey their lessons at least partially through trends that will have a larger impact on the learner's cognitive domain.

In this era of knowledge management, the teacher not only serves as a conduit for the transmission of knowledge, but also manages it by incorporating technology into his narrative. Management encompasses all activities, including planning, communicating, and consistently carrying out the same idea in a better way. As a result, the definition and requirements for the instructor and the learner must alter.

They must be educated so that they are conversant with the newest technology on the market and can use them to implement a holistic teaching style.

Due to worldwide demand and competition, today's society has embraced new technology for quick development and advancement. We are able to collect and disseminate information on a global scale thanks to the internet, mobile phones, satellites, personal computers, and worldwide web. A foreign investment in the development of human resources is higher education. A particularly helpful tool for involvement and communication with multilingual, multi-media groups is proven to be multimedia technology. Since independence, institutions have grown from 700 to 20,700, universities from 25 to 435, and student enrolment has increased from 1lac to 16 million.

The exponential rise of institutions is still inadequate to meet the youth of the nation's need for education. We must employ new technologies to educate everyone who wants to have access to higher education if we are to meet the goals established by the planning commission of 2007 and the national knowledge commission.

The use of contemporary technology in education has the following benefits: it increases collaborative learning and stimulates students to study. gives improved comprehension of the subject, promotes collaborative learning, enhances design abilities, fosters critical thinking, and facilitates social relationships.

According to the Oxford Advanced Learner's Dictionary, information technology is the study or use of electronic devices, particularly computers, for the storage, analysis, and manipulation of information as well as communication technologies for the sending, receiving, and sharing of information. According to UNESCO, "ICT" refers to a scientific, technical, and engineering field that is used to handle information and its application to social, economic, and cultural issues. With the existing technical infrastructure, there are no time or location restrictions on this communication, which may take place from anywhere at any time.

Information and communication technology (ICT), which has only recently replaced the term information technology (IT), reflects how quickly modern technology has affected education. For example, according to UNESCO, "Informatics is the science concerned with designs, realization, evaluation, use, and maintenance of information processing systems.

Including the ramifications for industry, commerce, government, and politics of the hardware, software, organizational, and human factors. To put it another way, ICT is a blanket phrase that refers to any type of communication tool, such as software, CD Rom, the Internet, television, radio, image-capture devices like still and video cameras, sensors, data logging control applications, e-content, e-books, and multimedia presentations.

ICT, then, refers to the computing and communication tools and characteristics that enable teaching, learning, and a variety of educational activities. It can effectively transform information anywhere while utilizing cutting-edge learning techniques like computers in synchronous and asynchronous environments. This helps to close the access to information and communication gap between those who have access to information and those who do not.

Multimedia can refer to a wide range of things, from a computer with speakers to a complicated application that can control numerous displays, laser disc or DVD players, and high-resolution audio. In a classroom, multimedia, especially when used with a video projector, may have a significant influence since it turns your computer into an adaptable chalkboard.

Numerous studies have demonstrated the usefulness and flexibility of ICT integration as a tool for achieving a range of educational objectives. What does information and communication technology, specifically computers and the internet, offer that conventional teaching does not? Information and communication technologies, specifically computers and the internet, are still only found in isolated pockets of innovations and are associated with a small number of enthusiastic institutions and individuals.

Every person is different, with special needs and a different manner of learning. Therefore, everyone has the right to an own method of learning.

Virtual classroom: A novel method of instruction

A virtual classroom is an educational setting built in cyberspace. Teachers and students are divided in this setting by both space and time. Through course management software, apps, multimedia materials, the internet, video conferencing, etc., the professors deliver course content. Students interact with the teacher and get the curriculum using the same technology.

There are many instruction modes in virtual classroom education that includes virtual classroom, hypertext 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.

Virtual classrooms, hypertext courses, video-based courses, audio-based courses, animation courses, web-supported textbook courses, and peer-to-peer courses are just a few of the several types of learning available. Communication takes place through electronic channels including message boards, chat rooms, voice mail, and e-mail, among others. Students submit their assignments online, and if assistance is required, tutors, other students, or a help desk are accessible. You may then promptly get feedback via electronic media.

This will increase access to cutting-edge learning opportunities, which will raise the caliber and efficiency of instruction even in distant parts of the globe. Without attending courses, one may connect with peers, specialists, tutors, and specialized professors while still getting the same educational experience. Virtual classrooms represent a manifestation of the information and technology revolution, we can claim with absolute certainty.

Hundreds of thousands of individuals are combining text, images, animations, movies, sounds, video clips, and other elements to make multimedia presentations, making multimedia one of the information technology field's fastest growing and most intriguing subfields. The ability to create professional presentations using multimedia programs like Microsoft PowerPoint, Lotus, freelance graphics, and others is now accessible to the average person. It has a wide range of applications in the entertainment business, sales presentations, education and training, and electronic reference material for digital publications.

The ICT Era's Impact on Teachers' Roles:

Certain new skills and competences would be necessary as instructors' duties evolved. In their new position, they must oversee the use of technology in the classroom while also enabling the students to get the most out of their education.

Teaching at all levels now has a scientific component since education is a profession. It has presented educators with new problems, including upgrading their understanding of mythology. The prerequisites for becoming a good teacher include developing effective communication skills, creating and implementing cutting-edge tools and techniques, and having a viewpoint on the current state of education.

The development and spread of knowledge is higher education's main goal. In the ICT era, the system must regularly offer a mechanism for the professional growth of the teacher's modules for pre-service and in-service training of teachers.

We can see the advantages of ICT for instructors when we consider the overall condition as well as the higher education situation in India.

❖ Access to new data sources in a wider range of experimental settings is made possible by data logging and digital video recording. The internet also facilitates easier access to reliable data.
❖ Teachers can demonstrate experiments that would not otherwise be possible thanks to simulations.
❖ Start a conversation on a topic.
❖ Online materials should be made available, such as publications, data presentations, or direct connections to websites relating to the study themes.
❖ ICT allows for faster, more precise data gathering, which cuts down on instruction time and produces higher-quality outcomes.
❖ ICT greatly facilitates involving and inspiring students.
❖ Instead of trying to provide all the help to one particular kid, the teacher can distribute the support time more equitably.
❖ They may offer immediate feedback, evaluate the work that students submit, and assign homework online.

Conclusion:

In this technologically evolved day, teachers cannot avoid the market's growing use of technology. Due to their prominent position in society, they have unique obligations beyond those of any other profession. Being the creative leaders of society, they must study and adopt fresh tactics and strategies in order to improve their pupils' capacity for remembering, comprehending, and learning.

The new breed of teachers should be technologically savvy and possess knowledge management skills so they can incorporate technology into their pedagogy, present content in various ways by different teachers, and manage the entire planning, organization, and implementation of the content in an appropriate manner.To address the problems of future education, the current trend in education calls for well-equipped, technologically prepared instructors and students.

REFERENCES:

1. KannamM, Ahrarhusain, new frontiers in education, vol 41,81,2008.
2. A.R.Kidwai,Higher Education -- issues & challenges, viva books, New Delhi
3. BucherlaMurari,Vijay Kumar, new technologies for teaching & learning in the infromation age, university news 1-7,vol.46,2008
4. Virtual Education,wikipedia. Org/wiki/virtual education.