ROLE OF ICT ON THE TEACHING AND LEARNING PROCESS

INTRODUCTION
Today's age is the age of Information and Technology (IT). Learning through ICT is also called e-learning. ICT is an indispensable part of the modern world. With the use of ICT, teachers bring quality education. In 1998, UNESCO World Education report refers about student and teachers must have sufficient access to improve digital technology and the internet in their classrooms, schools and teacher educational institutional. Teachers must have the knowledge and skills to use new digital tools to help all students to achieve high academic standard. According to UNESCO (2002), “ICT is a scientific, technological and engineering discipline and management technique used in handing information, its application and association with social, economic and cultural matters”. ICT is an acronym, that stands for Information Communication Technologies, that includes all technologies for the manipulation and communication of information (Swati Desai, 2010). Appropriate use of ICT can transform the whole teaching-learning processes leading to paradigm shift in both content and teaching methodology (Anu Sharma et al., 2011). ICT is one of the major factors for producing the rapid changes in our society. It can change the nature of education and role of students and teachers in teaching learning process. (Baishakhi Bhattacharjee and Kamal Deb, 2016). ICT enables a teacher to reach out widely efficiently and effectively. It helps teachers and institutions to be more modern and dynamic. (Sextana et al., 2017).

AIMS AND OBJECTIVES OF ICT IN EDUCATION
The following are the aims and objectives of ICT implementation in education:
- To develop distance education with national contents.
- To promote and facilitates the relationship between human and the environment.
- To promote technology literacy of all citizens, especially for students.
- To increase equal opportunities to obtain education and information.
- To implement the principles of long lasting learning.
- To increase a variety of educational services and methods.
- To share experiences throughout blogs to others from all over the world.
- To provide prospects and trends of integrating information and communication technology into general education activities.

ROLE OF ICT IN 21ST CENTURY’S TEACHING AND LEARNING
Role of technology in teaching and learning is rapidly becoming one of the most important and widely discussed issues in modern education policy, if ICT is properly used it holds great promise to transform schools and classrooms a new look and also provide more facilities to teachers and students. ICT also helps teachers, students and parents to come together. So, the knowledge of ICT is very much necessary for both pre-service as well as in-service teachers, which helps teachers to integrate technology in classroom teaching.

ROLE OF ICT ON THE LEARNING ENVIRONMENT
ICT has the following impacts on learning environment:

Provide tools to increase student productivity: ICT has transformed teaching and learning processes from being highly teacher-dominated to student-centred, and that this transformation will result in increased learning gains for students, creating and allowing for opportunities for learners to develop their creativity, problem-solving abilities, informational reasoning skills, communication skills, and other higher-order thinking skills (Bhaurao, 2015).

Overcome physical disabilities: ICT provides many devices which are helpful to those who are physically handicapped. Modified keyboards and mouse-drivers may be used for severe handicapped students. For students who are able to take notes during the course of the class, the system stores in a database lessons already taken for further studies and provides a more user friendly environment for blind students through audio interpretation of the course (Bingimlas, 2009), thus enhancing learning.

Active learning: According to Motamedi (undated), technology makes the students take an active role in learning instead of taking only a passive role of receiving information from the teacher. ICTs potentially offer increased possibilities for codification of
knowledge about teaching and innovation in teaching activities through being able to deliver learning and cognitive activities anywhere at any time (Larsen & Vincent-Lancrin, 2005).

Participation of students by motivation and challenge: Computer system does provide the opportunity to create a wide range of interesting learning experiences as it makes learning, participatory and a social process supporting personal life goals and needs (McLoughlin and Lee, 2007).

Tailoring learning to the learner. It is not possible to provide each student with a teacher and for that teacher to design learning experiences for that student, but ICT provide software for both weak and intelligent student so that they can assess them according to their pace.

LIMITATIONS OF ICT IN EDUCATION

ICT not only provide facilities to the students but it has many disadvantages also which are as follows:

• The installation and maintenance of certain hardware and software makes the use of ICT much expensive.
• Sometimes misleading and not correct information is passed using ICT.
• Teacher resistance and lack of enthusiasm to use ICT in education may also be another limitation (Himanshu Kumar Sharma, 2015).
• Unless teachers develop some basic skills and willingness to experiment with students, ICT use in education is in a disadvantage (Brosnan, 2001).
• Certain modes of communication such as internet and mobiles are leading the students to wrong directions.
• In many researches, it is found that some teachers do not have proper clarity about the usage of technology.

CONCLUSION

Information and Communication Technology enables a teacher to make his/her teaching very interesting and effective. It helps a teacher in maintaining records of the students, compile a data bank of exam questions, updating daily lessons etc. It also helps the institutions to make their institute more dynamic and modern. It also helps the students to make their learning permanent. Thus, ICT has positive effect on teaching and learning.

REFERENCES