

# Role of ICT in Teaching, Learning and Evaluation

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## **Abstract:-**

“Information and Communications Technologies (ICTs) are a diverse set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information. Communication and the information are at the very heart of the educational process, consequently ICT-use in education has a long history. ICT has played an educational role in formal and non-formal settings, in programs provided by governmental agencies, public and private educational institutions, for profit-corporations and non-profit groups, and secular and religious communities. The scenario of the classroom is changing. there's a technological gap between the progress of the society and instructional activities of the teacher within the classroom. If we see in our society on the one hand technology has revolutionized our society and on the opposite hand the teaching learning activities at college level have remained thus far faraway from technology. In our classroom the knowledge is imparted by the teacher in an ancient way, an educator centric mode which is most of the time boring and to not gain interest to the scholar. But present 21st Century education is student centric education.

## **Keywords:-**

ICT, technology,, student teacher learning , teacher training.

## I. INTRODUCTION

Globalization has brought about an immense change in every walk of life right from the habits of eating to habits of working. How education sector can be exception to this alteration? It has gone through a great change in the country like India. We have moved from our ancient heritage education system of Gurukula to the modern day techno-savvy university education system. Today, education has become all inclusive process covering almost all aspects of life—social, cultural, political, economic, national, etc. Present is the era of information communication technology (ICT) which made transmission and spread of information most reliable and easiest. The monitoring agency like National Assessment and Accreditation, more popularly known as NAAC often emphasizes and signifies the process of teaching-learning and evaluation considering one of the major criterions of 350 points/ marks among seven indicators of assessment. ICT is an inevitable marker and a part of strategy of any educational institution which wants to cater the teachers-students diversity and aims at smooth/ fair administration to come out with potential results from the institution.

“Information and Communications Technologies (ICTs) are a diverse set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information. Communication and the information are at the very heart of the educational process, consequently ICT-use in education has a long history. ICT has played an educational role in formal and non-formal settings, in programs provided by governmental agencies, public and private educational institutions, for profit-corporations and non-profit groups, and secular and religious communities.” (unesco.org). According to the definition, the role of ICT tools is very wider and has multidimensional and multifunctional task as it can be used to “communicate”, “to create”, “disseminate”, “store” and “manage” information on diverse levels—teachers-students, teachers-management, students-management, teachers-students-administration, teachers-students-public, etc. The tools and resources of ICT include all modern day inventions in the field of internet, software and hardware tools which are used to communicate through satellites, computers, mobile phones, tablets and similar devices and also the old day tools like telephone, television and radio. It has enhanced the progress in education sector rapidly.

Perceptions related to the use of ICT tools in the classroom for teaching and learning were found as follows:

- Students concentrate more on their learning
- Students work harder
- Classroom climate become more productive
- Classroom climate become less disturbing as students engage more in their work
- Students feel more autonomous in their learning
- ICT facilitates collaborative work among the students
- Students understood more easily what they learn

ICT adoption in the current study is understood as a gradual switching over to automation of the educational process not only in administrative activities like students admission, registration, and evaluation but also developing a customized learning management system (LMS) and transferring all the courses and the related data onto it.

## II. LITERATURE REVIEW

This section presents a recap of the findings from earlier studies regarding the adoption of ICT in university education and its impact on the performance of university students., There have been various studies carried out to investigate the relationship between ICT and quality of education., These studies have focused on various such factors that have been influenced by ICT, but very few studies evaluate the impact of ICT adoption on the performance of university education. Similarly, these studies also give mixed findings about the impact of ICT on the university students' performance. For instance, Ellis and Loveless indicate that higher education pedagogy can neither be isolated from academic achievement nor from the teaching process and innovation. The study affirms that the potential role of information and communication technology in higher education cannot be overlooked. Chan et al. in another study make a similar observation and assign great significance to the critical function of ICT in democratizing the university education and meeting new and dynamic demands of graduate students. In a similar study, Sari and Mahmutoglu observe that in order to bring a change in teaching methodology in a university, a paradigm shift is required that would recommend adoption of student-centered approaches. , new methodology, according to the authors, should aim at making the student an active element in the learning process, rather than passive through an adequate and effective guidance from the tutorial team. Likewise, Iniesta-Bonillo et al. find out that the use of information and communication technology is significant in placing students in an active position and in enhancing the effectiveness and Efficiency of the tutorial support. As a result, all relevant stakeholders involved in higher education have made tremendous efforts to ensure adoption of ICT in their university education system. According to a report published by the United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute of Statistics (2013), governments and university managements globally have heavily invested in adopting of information technology in their education systems. Overall, numerous attempts, both theoretical and empirical, have been made in a bid to evaluate the impact of ICT adoption in the education system. The recent research frameworks for investigating the adoption of ICT in higher education have focused only on aspects related to performance in education. Such performance indicators have been utilized in these frameworks to establish how variables such as infrastructure and availability of other resources contribute to the impact.

The university administrators and faculty too look for the most appropriate approaches to harness the application of ICT in improving their teaching methods culminating into improvement of the students' performance. Nonetheless, tangible achievement of all such efforts that should be demonstrated as results fuelled by the ICT or as impact of its adoption is not easily identifiable.

## III. NEED AND SIGNIFICANCE OF THE STUDY

The scenario of the classroom is changing. there's a technological gap between the progress of the society and instructional activities of the teacher within the classroom. If we see in our society on the one hand technology has revolutionized our society and on the opposite hand the teaching learning activities at college level have remained thus far faraway from technology. In our classroom the knowledge is imparted by the teacher in an ancient way, an educator centric mode which is most of the time boring and to not gain interest to the scholar . But present 21st Century education is student centric education. Students learn from multi sources and for this reason use of ICT & Multimedia is extremely much essential in educational field and simultaneously teachers knowledge of ICT and Multimedia also required. So present study has great need and significance because this study shows roles of ICT teachers education.

## IV. OBJECTIVE OF THE STUDY

The objective of this study is

- To find out the roles of ICT in teaching ,learning and evaluation.

## V. METHODOLOGY

This present study is predicated on secondary sources like books, Articles, Journals, Thesis, University News, Expert opinion and websites etc. the tactic used is Descriptive Analytic method.

### **Why can we use ICT in teacher Education?**

The classroom is now changing its look from the normal one i. e. from a method to 2 way communication. Now teachers also as students participate in classroom discussion. Now Education is predicated on child centric education. therefore the teacher should prepare to cope up with different technology for using them within the classroom for creating teaching learning interested. For effective implementation of certain student-centric methodologies like project-based learning which puts the scholars within the role of active researches and technology becomes the acceptable tool. ICT has enabled better and swifter communication; presentation of ideas simpler and relevant way. it's an efficient tool for information acquiring-thus students are encouraged to seem for information from multiple sources and that they are now more informed then before. So for this reason ICT is extremely much necessary for Teacher Education

**Recent Trends in Teacher Education:-**

Based on various changing needs of our society now emphasis is additionally given to the varied educational theory and academic practices. consistent with these theories and practices changes also are undergo in teacher education also. it's natural that teacher education must include new technology. Teachers should also know the proper attitudes and values, besides being proficient in skills associated with teaching. As we all know the minimum requirement of any training programme is that it should help the trainee to accumulate the essential skills and competencies of an honest teacher. Now-a-days new trends in teacher education are Inter-disciplinary Approach, Correspondence courses, orientation courses etc. Simulated Teaching, Micro Teaching, Programmed Instruction, Team Teaching also are utilized in teacher education. Now-a-day Action Research also implemented in Teacher Education. ICT acts because the gateway to the planet of data and helps teachers to be updated. It creates awareness of innovative trends in instructional methodologies, evaluation mechanism etc. for professional development

**Different Strategies for applying ICT in Teacher Education:-**

i) Providing adequate infrastructure and technical support. ii) Applying ICT altogether subjects. iii) Applying new Pre-service teacher Education curriculum. iv) By using application software, using multimedia, Internet e-mail, communities, understanding system software.

**Role of ICT in Teacher Education:-**

- ICT helps teachers in both pre-service and in-Service teachers training.
- ICT helps teachers to interact with students.
- It helps them in preparation their teaching, provide feedback.
- ICT also helps teachers to access with institutions and Universities, NCERT, NAAC NCTE and UGC etc.
- It also helps in effective use of ICT software and hardware for teaching learning process.
- It helps in improve Teaching skill, helps in innovative Teaching.
- It helps in effectiveness of classroom. It also helps in improving professional Development and academic management also as enhances Active Learning of teacher Trainees.
- It is now replacing the traditional technology. As we all know now-a days students are always have competitive mind. So teacher must have the knowledge of the topic . this will be done through ICT.
- ICT helps teachers in preparation for teaching, so as to introduce ICT in pre-service teacher education different methods and methods are applied. Different tools are used like data processing , Database, Spreadsheet etc. Various technology based plans are wont to help the teachers for his or her practice teaching.
- ICT prepares teacher for the utilization of their skills within the real classroom situation and also make students for his or her future occupation and social life.
- ICT used as an assisting tool for instance while making assignments, communicating, collecting data & documentation, and conducting research. Typically, ICT is employed independently from the topic matter.
- ICT as a medium for teaching and learning. it's a tool for teaching and learning itself, the medium through which teachers can teach and learners can learn. It appears in many various forms, like drill and practice exercises, in simulations and academic networks.
- ICT as a well-liked tool for organisation and management in Institutions.
- Teachers must provide technological support to find out using movie , animation, simulation training which helped student teachers to offer model presentation. If the teacher is very equipped with technology, the scholar also will be equipped with technology.
- It removes the normal method of teaching and prepare teacher to use modern method of teaching.
- ICT is plays a crucial role in student evaluation.
- ICT is store house of institution because all educational information can safely store through ICT.
- ICT helps Teacher to speak properly with their students. So ICT bridge the gap between teacher and students.
- ICT helps Teacher to pass information to students within a really little time.
- ICT helps Teacher to style educational environment. ICT helps Teacher to spot creative child in educational institute. ICT helps Teacher to motivate students and growing interest in learning. ICT helps Teacher for organizational preconditions (vision, policy and culture). It is additionally helps Teacher for his or her personnel support (knowledge, attitude, skills). ICT helpful for technical preconditions (infrastructure). ICT helpful for designed learning situations which are needed for both vocational training and therefore the training of future teachers (in the teacher training institutes).
- Teacher training institutes can develop their curriculum using ICT.
- With the assistance of ICT Teacher training institutes can develop communication network. Teachers learn most from their own networks (learning from others) with the assistance of ICT.

## VI. CONCLUSION

Teaching occupies an honourable position within the society. ICT helps the teacher to update the new knowledge, skills to use the new digital tools and resources. By using and acquire the knowledge of ICT, practice teacher will become effective teachers. ICT is one among the main factors for producing the rapid changes in our society. It can change the character of education and roles of scholars and teacher in teaching learning process. Teachers in India now started using technology within the class room. Laptops, LCD projector, Desktop, EDUCOM, Smart classes, So we should always use information & communication Technology in Teacher Education because now teachers only can create a bright future for college kids

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