# INNOVATIVE ICT TRENDS FOR INTERACTIVE LEARNING ENVIRONMENT IN TEACHER EDUCATION

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## Introduction

It is evident by the results of the researches that competency of teacher is a potent factor to determine the learning outcomes of students.

NCERT has defined teacher education as: A programme of education research and training of persons to teach from pre primary to higher education level .Teacher education is a programme that is related to the development of teacher proficiency and competency that would enable and empower the teacher to meet the requirements of profession and face the challenges there in.

As teacher is the pivot of teaching process through this paper efforts have been made to bring into recognition first what is the terminology for which ICT refers for, how and when it has generated its roots in India, what is the perspective to make its scheme and policy by the government for its intervention to make learning environment interactive.

## Concept, Scheme and Policy of ICT

Every education system is putting all its efforts to make every level of  class interactive and student centred .Many researches explored that any trainee can better learn with the variety of sources specially multimedia products ( Podcasting , teleconferencing ,virtual classroom audios videos) ,web based learning formats ( online courses, vidwan vidya mitra)  and this is the reason ICT was launched in DEC 2004  to provide opportunities to teachers not only  to build  their capacity on ICT skills but also to  make their learner to learn through the incorporation of  computer aided learning process. This mission also aims at bringing all govt and govt aided institutions under the ambit of the scheme with the availability of  budgery provision too. This scheme was again preceded further by Department of Education and literacy ministry of MHRD govt of India in March 2009 as part of Central govt. commitment to provide good quality Teacher Education and School

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education accessible and affordable to all persons.  For this again further proceeding had been taken place in 2014.Then National Policy on ICT in school education (2012) and Digital India Campaign (2015) gave the suggestions to introduced various courses for teachers in ICT in education. These courses can be accessed at **http://ictcurriculum.govt.in.**

**Initiatives of Government to launch various ICT Programmes**

Keeping in view this targets many initiatives came into progress to provide its access in a vibrant ways with the efforts of CIET who is   feeding regular services for various educational programmes .As a **weblearning** format **Swayam** gave the platform  to access the online courses ,with assimilation of MOOCS as well ,many repository bodies like NROER,OER etc. but these govt initiatives still requires to put more courses for education .As a source of multimedia CIET also transmits DD1 on national network ,launch of Swayam Prabha ,DTH T.V network by MHRD GOL,  it is also feeding 24*7 'KISHORE MUNCH '. This Swayam Prabha has 32 DTH channels that telecast high quality educational programmes .TO access of online material for everyone ePg Pathshala is also included in this.

**Trends of ICT in Teacher Education**

Along with this at the current point of time some trends are used for interactive classroom in the area of education, some of them are given below:

- **Artificial Intelligence:** Applicationof Artificial intelligence will impact education at greater level to individual learning.

- **Virtual Reality:** This is another way to interact with large group of trainees as within three dimensional environments. The atmosphere sees real but actually it's virtual.

- **M-learning**:  The usage of internet on mobile phones also has made web learning accessible for all.

- **Social Media at Institutions:** This a platform to connect far distant people under one roof .Educational institutions can connect through social media with their students.

- **Learning through smartboards :** There are spots that arise in which a student can't go into a classroom or attend normal classes .In these situations cloud based classrooms can be ideal .These can include basic next lessons or can be as advanced as to include video lessons or even live chat sessions with the teacher via instant messenger or video messaging programmes like skyp,Here student can interact with teacher at any distance

- **MOOCS (Massive open online course):** MOOCS can be considered as a term or word related to the scalability of open and online education.
- **Use of Videos in Teacher Education:** Videos are very useful in concept formation .It is a very interesting and interactive way to make them understand any topic.

## Effects of ICT in Teacher Education

After knowing all these concerned efforts and trends ;it comes in our mind; how to incorporate them to bring fruitful results and how it inculcates the interest and engages the trainees at their learning .So it will workout for self learning as well in peer learning. The class will be more interactive if it will be incorporated in designing Flip class room and using Asynchronous and Synchronous media too. As psychology of learning suggests that the use of audio -visual in education has several advantages. Research also have found that other conditions being equal ,more information is taken in if ICT is used simultaneously for interaction along with vision and hearing as learning will enhanced with a condition of organised material .

## Advantages of ICT in Teacher Education:

ICT is very useful and interesting way of presenting anything. There are some advantages of ICT given below:

- One of the advantages of ICT is individualization of learning means each and every one can learn according to own potential.
- Another one is interactivity which means learning through ICT is interacting with other people at the given place, without leaving own comfort zone.
- It motivates learner to learn more by giving immediate feedback and ingage them all the time.
- It develops cooperative learning means anyone can learn through the cooperation of others.
- We can serve multiple teaching functions and handle diverse audiences at same time by using ICT.
- Information can deliver at high speed in wide area at low cost.
- The quality of information is Uniform means everyone can get same type of knowledge from the same source of information.
- We can get a bulk of information from internet so it is called the Information Highway.

**Disadvantages of ICT in Teacher Education**

As we know everthing which has advantages also having some disadvantages too, these are given below:

- Its start up cost and infrastructure cost is very high.

- Relevancy of information is also doubtful.

- Officers, trainers who are using this equipment are needed to do time to time reorientation and retraining to meet the new progress.

- ICT is artificial intelligence so there is a gap of understanding of teaching and learning. ICT don't have any emotional attachment between teacher and student .It just follows the commands given to someone.

**Conclusion**

The use of ICT creates open environment which enables the storage and reuse of information material as also it enables the interface among the teachers as well as students. ICT and teacher education works as side by side. Most of things are possible by ICT,like "access to information "which considered being one of the most important benefits of the uses of ICT in teacher education .It is very useful for teacher education. It represents things in more decorative way which makes teaching and learning more interesting and interactive. Apart from having enabling telecommunications and ICT policies, governments and higher education institution need to develop strategies for more effective ICT content delivery   and media deployment and sustainability.

**References**

- Asynchronous.(n.d).    In    Wikipedia    .Rtrieved    June    9,2017    from https://en.wikipedia.org/Wiki/Asynchronous _communication

- Dawes L.(2001) What stops teachers using new technology ?IN M.Leask (ed),Issues in Teaching using ICT(pp.67-79).London :Routledge.

- Education,(n.d).In Wikipedia. Retrieved June 5,2017,from and communication https://en.wikipedia.org/wiki/Education

- Information   and   Communication    technology.(n.d).Wikipedia.Reterived   June   4 2017,from        https://en.wikipedia.org/wiki/Information    _and    _communication _technology

- MurahariB.,Kumar v.v(2008),"New Technologies for Teaching and Learning in the information age",University News ,46(40),1-8

- Synchronous.(n.d).In Wikipedia.Reterieved August 7,2017,from https://en.wikipedia.org/wiki/SYnchronous-serial -communication

- Tomei,L.A(2005).Taxonomy for the technology domain .USA:Information Science Publishing.

- Teacher education .(n.d.).In Wikipedia.Reterived October 14 ,2017 ,from http://en.wikipedia.org/wiki/Teacher -education