



Critical Understanding of ICT in Education

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1. Introduction

ICTs are technologies, along with developing such understanding; the course will also help student-teachers to learn integrating technology tools for teaching learning, material development, developing collaborative networks for sharing and learning. This learning can help integrate pre-service and in-service teacher education, address traditional challenges of teacher isolation and the need for adequate and appropriate learning resource materials (MHRD, 2012). The constantly developing field of ICT will always need exploration of new technological advancements in the context of teaching-learning. This course aims to give an understanding of ICT and its potentials in changing social contexts. It will give a broad understanding of ICT that include computing and communication technologies. We have to understand their role and responsibility as a user is not disconnected with their wider social roles. The choices as personal as preferring software or a website over the other do have social and economic implications. Using technology in a classroom is an important skill for learning teachers towards ICT enabled education. This course focuses on equipping the student teachers with

- A social perspective on the implications of ICT for larger society.
- skills of basic computer literacy and ICT-aided learning;
- skills of applications of ICT in administrative and academic support systems;

2. Different ICT Techniques Used in Classroom

There are different techniques that may be use in classroom for Enriching Learning Situations. ICT techniques for enriching learning situation were following.

2.1 MOOC (Massive Open Online Course)

Massive Open Online Course is an online course aimed at unlimited participation and open access via the web. In addition to traditional course materials such as filmed lectures, readings, and problem sets, many MOOCs provide interactive user forums to support community interactions among students, professors, and teaching assistants (TAs). MOOCs are a recent and widely researched development in distance education

2.2 Following are famous MOOCs

- Khan Academy
- NPTEL (<http://nptel.ac.in>)
- coursera (<https://www.coursera.org>)
- UDACITY (<https://www.udacity.com/>)
- KHAN ACADEMY
- UDEMY
- EDX
- FUTURE LEARN
- OPEN 2 STUDY
- NOVOED

2.3. Virtual classrooms

Virtual Classroom is an online classroom that allows participants to communicate, view presentations, interact with learning resources and work in groups. A virtual classroom is an online learning environment. The environment can be web-based and accessed through a portal or software-based and require a downloadable executable file.

Just like in a real-world classroom, a student in a virtual classroom participates in synchronous instruction, which means that the teacher and students are logged into the virtual learning environment at the same time.

Many schools and businesses have rolled out virtual classrooms to provide synchronous distance education. Virtual classroom software applications often employ multiple synchronous technologies, such as web conferencing, video conferencing, live streaming, and web-based **VoIP** (voice over IP) to provide remote students with the ability to collaborate in real time. To enhance the educational process, applications may also provide students with asynchronous communication tools, such as message boards and chat- capabilities.

2.4 Flipped Classroom

The flipped classroom inverts traditional methods, delivering instruction online outside of class and moving “homework” onto the classroom. The flipped classroom is a pedagogical model in which the typical lecture and homework elements of a course are reversed. Short video lectures are viewed by students at home before the class session, while in-class time is devoted to exercises, projects, or discussions.

2.5 Online Learning

We may use below types of learning with digital instrument through internet connection. With the help of online learning student may learn anytime and anyplace. Following are major technique for online learning:

- Synchronous
- Asynchronous
- Blended learning
- M-Learning (Mobile Learning)

References

1. <http://nptel.ac.in>
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3. <http://www.slideshare.net/SylviaSuh/mobile-learning-powerpoint-28968845?related=1>
4. https://en.wikipedia.org/wiki/Flipped_classroom
5. https://en.wikipedia.org/wiki/Massive_open_online_course
6. <https://en.wikipedia.org/wiki/M-learning>
7. <https://www.coursera.org>
8. <https://www.udacity.com>