KNOWDEDGE OF ICT FOR TEACHERS IN UNDERGRADUATE EDUCATION

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Abstract

The ICT is making teachers job necessary by enabling the construction and connection of content application and processes. The Indian higher education society is planning for a world in which information communication technology (ICT) will be so contained that every institution of higher education will change. Information communication technology is very dynamic in nature. It has lots of potentialities to improve and manage different aspects of Higher Education, such as teaching, increasing accessibility, research and development virtual universities, total quality management and human resource development. If any teacher knows the meaning of information literacy, its standards and principles, they can make wonders in higher education. Learning with information communication technology, learning from information technology, learning around technology and learning through technology makes teacher as facilitator than just a teacher in undergraduate education.

Keyword: UNDERGRADUATE, ICT, TEACHERS

1.Introduction

Earlier Teaching professionals have a love and hate relationship with ICT. Modern era teacher love ICT, because it is made teachers profession necessary by enabling the construction and correlation of remarkable volumes of contents, applications and processes. Teachers also hate ICT, because it regularly threatens to replace the need for professor. Whether the teachers love or hate. But, we are participating in a co-evolutionary journey with ICT that is defined by continuous rapid change. Teacher have a real opportunity to positively influence results, by injecting our understanding and healthy skepticism in to the information communication technology acquisition and integration process.

According to the UNESCO information and communication technology as "scientific technological and engineering disciplines and the management techniques used in information handling, processing and their application, computer and its interaction with men and machines and associated socio-economic and cultural matters". ICT is a systematic study of artifact that can be used to provide descriptive information in order to provide significance or support for decision making and also artifact that can be used for association, processing, communicating and appliance of information. Comprehensively ICT means it is a use of software and Hardwar for well-organized and management of ICT information, i.e. storage, retrieval, processing, communication diffusion and sharing of ICT for educational and socio-cultural up gradation. As Shannon Claude quote "Information causes changes; if it doesn't, then it is not information.

2.Computer Conferences/ assisted learning

Computer-Assisted are Computer Aided teaching and learning are very popular in now a day's, in particular when the internet is free accessible for almost people. Internet, computer and science are intimately depends each other. The teacher and learner should keep in mind its advantages and disadvantages of computers information. ICT, internet and computer is tools for smooth progress of education process. The professionals should not depend on the ICT and computer machinery, they should improve teaching and

learning capability. Computers programmes are not flexible for pupils learning. It should be provide flexible learning and teaching. It may also restrict the Pupils. Thus, when using the computer based teaching and learning instructors must play a vital role of helping pupils

3.Video conference

Video conference and chatting is recently developed new technology and reach a level of constancy, usability and affordability. It is permit its use in real instruction scenario rather than research. Exploring the ICT in an actual setting highlight any problems of use; on the other hand it fails to provide enlighten as to the original reasons for the achievement or breakdown of any work. It is carefully controlled mental experiments which influence person variables create a simulated atmosphere and the results may not be general stable to real settings. The aim of the Video Conferencing is create linking between pupils-centered rather than technology-centered view of the problem. This requires understanding the problem from a number of perspectives:

- To know structure of the learning.
- To know technology of information communication.
- To know the ICT within that configuration.
- To know best and satisfying use of ICT.

Video-conference is helping the professionals to reach geographically remote pupils and linking different schools and classes for collaborative work.

- Providing all disciplinary subjects to learn in real atmospheres.
- The collaborating work with schools and outside of the schools.
- Topic or issues based conference with the student groups are person.
- Providing lifelong education for the pupils.
- Professional growth of the teaching staff.
- Meeting with staff and Department without wasting the time.
- Advising the growth of Personal educational plan.
- Interviews of the person for jobs.

Video-conference also advantage for the society and bring together several cities for special events and meeting.

4.Information Technology and Higher Education

Information technology is dynamic in nature. It has lot of potentiality to improve and manage different aspects of higher education such as teaching, increasing accessibility, research and development virtual university, total quality management and human resource development.

5.Information literacy

Information literate teachers should be able to distinguish when the information is necessary and has the talent to successfully find, evaluate, and utilize the information. The teachers who are information literate, have learned and they know how knowledge is structured, how to locate information, how to information in such a way that others can learn from them.

The wider sense of information literacy defined by Shapiro and Hughes "information literacy is liberal art that includes many factors beyond the technical skills promoted by computers and listed seven types of literacy which is very relevant to present context.

1. Traditional and computer literacy.
2. Resource literacy; bibliographic instruction.
3. Socio-economic and structural literacy; reorganize the relevant nature of information in group or institutional setting.
4. Research literacy; design, tool and techniques.
5. Publishing literacy; writing and producing of content.
6. Modern technology literacy; adaptability and lifelong education.
7. Critical literacy; evaluate of information and technology.

6.Literacy Information standards

1. Access the information efficiently effectively.
2. Critically evaluate the information completely.
3. Use the information creatively and accurately.
4. Follow the related information for personal interests.
5. Understand literature and other original expression of the information.
6. Attempt for qualitative seeking information and knowledge generation.
7. Identify the significance of information to a classroom in particular and democratic society in general.
8. Exercise fair performance in regarding ICT.
9. Contribute successfully in group to scrutinize and produce information.

A teacher must know that information literacy that can be promoted in all classes. The key information literacy elements are **ACCESS, UNDERSTAND, EVALUATE, APPLY, and COMMUNICATE, CREATE and VALUE.** According to Prof. Irving H Buchn, the classic 3R's of education will be supplemented by 3T's i.e. Technology, Teaming and Transference which includes Seven C's of Knowledge has survival skills; Critically thinking and doing, Creativity, Collaboration, Understanding of cross culture, Communicating, Computing, and career & learning with self-reliance

7.Five C's of Modern Learning Theory

1. Context: Environmental learning.
2. Construction: mental model building.
3. Caring of intrinsic motivation.
4. Competencies: Multiples intelligence.
5. Community: learning and practices.

8.LENSES ON LEARNING AND INFORMATION TECHNOLOGY

1. **Learning from ICT:** When a learner learns from ICT, the content or skills to be learned are somehow built into software packages the software is, in essence, doing the teaching and learning ability.
2. **Learning with ICT:** This is lens focuses on ICT as a tool, and includes the range of supportive devices and tasks from word processing to statistical packages to multimedia authorizing system and all points in between. It is essential for consider how ICT in this capacity may influence the development of his/her perspective, on the materials and information on which the learner is working
3. **Learning around ICT:** When individuals learn around ICT, skills and contents are learned through the structuring of the circumstances in which the computers are being used. Desired changes regarding the computer utilization and motivation as well as the attributions of particular computer applications can influence how pupils learn around the ICT. In class teaching co-operative and collaborative learning strategies are very common way of structuring computer environment, such that pupils frequently learn as much from interaction around the computer as they do from their interaction with ICT.
4. **Learning through ICT:** all ways learning happened primarily through the interaction of pupils at a distance, as mediated by ICT. The pupils may be considered as facilitated through the ICT. For examples e-mail, online groups chatting, electronic discussion groups and bulletin boards, many more types of computer facilitation.

9.CONCLUSION

Teaching and learning is a continuous process in this setting teacher will operate ICT in a system way, based on these four components. In the first, information collaborated with the lecture and other approaches of direct teaching. In the second, the pupil discusses between themselves or with their teacher about the particular topic. The third is theoretical space of ICT, where thoughts are developed in the relative solitude and where pupil work are designed and built. The fourth is the contextual space, where the things that have been

learned are applied in the world outside of college/university.

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