



LEVERAGING INFORMATION AND COMMUNICATION TECHNOLOGY FOR ENHANCED TEACHER TRAINING

*Rohie Jan

**Aabid Hussain

ABSTRACT:-

Throughout the world, countries have acknowledged information and communication technology (ICT) as an effective tool in inducing the teaching-learning process. The advent of ICT has ushered in an unprecedented transformation in how individuals engage and communicate. Across the Globe, countries demand technology-based teaching, which is becoming one of the most exacting professions in our society. Where knowledge is expanding swiftly advanced technologies are demanding teachers to learn how to operate these technologies in their teaching. While new technologies increase the need for teacher training, information and communication technology (ICT) can furnish more effective and amenable ways for professional evolution for teachers, improve pre and in-service teacher training, and bridge teachers to the global teacher community the objective of this paper is aimed to study the usage of ICT in teacher training and to facilitate professional development of teachers. Rested in this reflection, areas of attention are the promotion and furtherance of the appropriate use of ICT by teachers at the global level. The author tries to manifest that the use of ICT is not only a matter of new prospects, but also brings with it new challenges, suggestions, and new implications.

Keywords:- ICT integration; teacher education; teaching and learning; technology effectiveness.

INTRODUCTION:-

Over the last decades, endeavors to integrate ICT in most aspects of school practice have received a good deal of attention in the educational system. ICT is becoming an essential tool for the teaching and learning process not only in primary and high schools but also in training colleges. Research has shown that teachers can use ICT to deliver their content more effectively and efficiently and pupils can learn and understand better.

It is widely acknowledged that competence in handling ICT is an important asset and requirement for every individual in modern societies. It is also believed use of ICT in teacher training ICT's

can enable teachers to transform their teacher practices, given a set of enabling conditions teachers' pedagogical practices and reasoning influence their uses of ICT and the nature of teacher ICT use impacts student achievement. Teacher training is a key factor for improving the effectiveness teaching process. The effective use of ICT in education is a very important aspect not only in improving learning methods and the quality of education but in teacher training as well. It has the potential to make lifelong learning more readily available for everybody. Teachers will be trained with the necessary skills to be able to use ICT in the teaching process. In our society teaching is becoming one of the most challenging professions where knowledge is expanding rapidly and modern technologies are demanding teachers to learn how to use these technologies in their teaching. As new concepts of learning have evolved, teachers are expected to facilitate learning and make it meaningful to individual learners rather than just to provide knowledge and skills. Modern developments and innovative technologies have provided new possibilities in teaching professions, but at the same time have placed more demands on teachers to learn how to use these new technologies in their teaching (Robinson & Latchem 2003) these challenges ask teachers to continuously retrain themselves and acquire new knowledge and skills while maintaining their jobs (Corlson & Gadio 2002)

In this 21st century, a variety of ICT can facilitate not only the delivery of instruction but also the learning process itself. ICT can promote international collaboration and networking in education and professional development There's a range of ICT options – from video conferencing through multi-media delivery to websites that can be used to meet the challenges that teachers face today. There has been a shred of increased evidence that ICT may be able to provide more flexible and effective ways for lifelong professional development for today's teachers. Because of rapid development in ICT, especially the internet, traditional initial teacher training, as well as in-service continued training institutions, are undergoing a rapid change in the structure and content of the training and delivery methods of their courses. However, combining new technologies with effective pedagogy has become a daunting task for both initial teacher training and in-service training institution

OBJECTIVE:

The objective is to study the use of ICT in teacher training and to facilitate professional development. In the modern scenario, a teacher without knowledge of ICT can't be recognized as a trained teacher. Every teacher needs to make use of technology effectively in the classroom during the teaching-learning process. Merely introducing technology to the educational process is not sufficient, but its enforcement in an operational way is important. Based on this reflection areas of attention are the promotion of the appropriate use of ICTs by teachers. The author tries to

show that ICT use is not only a matter of new possibilities but that it also brings with it new implications and new challenges. Thus, the individual attitude and willingness to accept the technological challenges of modern technology play a significant role. ICT functions as fuel in the process of learning and proves a mild stone in the accomplishment of all the higher-level objectives in the teaching-learning process.

NEED OF ICT:

In the modern scenario of science and technology teacher education evolved by utilizing ICT teacher education is experiencing rapid expansion of ICT and what is needed, is an IT-literate community of teachers for the effective use of these services. The drive towards greater use of technology in education is aimed at modernizing the schools. The benefit that ICT is thought to bring is to reduce teachers' workload. It is also believed that teachers can raise the level of pupil attainment when they use ICT to support teaching

Teacher education in India today faces several problems. These problems include the shortage of qualified trained teachers, very large student populations, high dropout rates of students, and weak curricula. All these negative aspects result in poor delivery of education. The educational crises are worsened by the devastating effects of increasing poverty, a brain drain in the teaching community, budgetary constraints, poor communication, inadequate infrastructure, etc. While societies undergo rapid changes as a result of increased access to technology, the majority of school-going youth continue to undergo traditional rote learning. Very little is done to take advantage of the wealth of ICT whereas the processing of information to build knowledge is one of the essential literacy skills vital for the workforce in the 21st century it is often overlooked in current educational practice. The teacher should prepare to keep up with technology utility in the classroom. ICT is not only an essential tool for teachers in their day-to-day work but also offers them opportunities for their professional development.

UTILIZATION OF ICT IN TEACHER TRAINING:

ICT plays an important role in teacher training for innovative trends in instructional methods, assessment methods, etc. In the ICT training program it was found that both lectures, (teacher educators)and students (pre-in-service teachers) go through three stages when learning how to integrate ICT into their work : (ChandanaDey 2011)

Phase I:- Awareness

Staff and students are attracted by the internet access. With very basic skills (e.g. from a one-day workshop or being shown by their colleagues), they browse the internet, mostly for personal searches (e.g. forming, business, and parenting) and for email. Teaching staff are confronted with a more “knowledgeable” group of students, who take their downloads to class.

Phase II:- Guided Integration

Lectures and students undertake a series of workshops and experiment with some of the applications. Integration generates some initial irritations and discomfort and requires individual attention by the team imparting ICT training. Staff and students understand how the integration of ICTs impacts learning and teaching. Lectures develop strategies to adapt their teaching to an information-rich environment.

Phase III:- Realization

ICT-based work is central and students are involved in high-level thinking, decision-making, and problem solving. Some old practices become obsolete. The real issue is not about whether technology is used in the classroom, but whether technologies enhance the learning process. All learners go through these phases at their own pace

USAGE OF ICT TO FACILITATE PROFESSIONAL DEVELOPMENT:

The use of ICT as the core technology for delivering teacher training can be found in limited contexts, there are many examples of ICT, particularly Internet and web-based communication technologies, being used to support teachers going professional development and networking. Many countries have developed websites to provide online resources for teachers and to facilitate them, Networking is based on the assumption that professional development should be an integral part of daily practice for all teachers and the use of the internet would enhance continuous professional development activity of teachers, connecting teachers to larger teaching communities and allowing for interaction with expert groups. ICT is not only an essential tool for teachers in their day-to-day work but it also offers them opportunities for their professional development (Dahaya -2005)

One of the best ways to develop teachers' ICT skills and promote pedagogy integration in their teaching is the provision of ICT-based training environments where on-demand access to materials, peers, and networks of experts where expertise and advice can be obtained and active decisions can take place concerning technology or pedagogy. In this regard, the approach of using ICT to support teachers, ongoing professional development, and networking can be very effective as long as organized support is provided (Pacey 1999).

SUGGESTIONS:

Students may be taught by highly qualified and experienced faculty in “reasonably sized” classes. This is in contrast to having many of these courses taught by graduate assistants or offered only in a very large lecture class format. Teachers may present a role model of high-quality teaching. Among other things this means not depending mainly or exclusively on the commonly used “stand and deliver” approach. “teachers are required to make effective use of presentation aids. Websites

developed specifically for the courses., and Email for communicating with students. “Appropriately teach ICT as part of the content of the course. Do this in an integrated, rather than an “add-on manner.” Teachers may encourage and facilitate.

Students make appropriate use of the web, Email, desktop publishing, desktop presentation, and other ICT aids to learn the course material, do the course assignments, communicate with their fellow students, and communicate with the course faculty.

Overall, governments and teacher training institutions seem to recognize the importance of integrating ICT into education and teacher training. In many cases, the national vision for ICT use in education has been integrated into teacher training.

CONCLUSION:

ICTs in education are not transformative on their own. Transformation requires teachers who can use technology to improve student learning. The professional learning of teacher educators in the area of ICT integration is essential. Unless teacher educators model effective use of technology in their classes. It will not be possible to prepare a new generation of teachers, who effectively use the new tools for teaching and learning. Many workshops have assisted ICT users with the integration of ICTs in the classroom. Insights and experience gained in the ICT training program can serve as an entry point in the development of a national/regional training program. ICT can be viewed as an effective vehicle to transform classroom learning into learning communities with students. Teachers and community members all play a vital role in directing the course of education. For education to reap the full benefits of ICT in learning, pre-service and in-service teachers must be able to use effectively these new tools for learning. ICT represents a challenge to change teacher thinking, and teaching styles, to apply new teaching methods. ICT can be used as a tool to solve different types of problems in the development of student thinking or creative activities, and to support collaboration among all participants of the learning process as a standard component of the educational environment. ICT can enable teachers to use different types of technologies during their teaching so that their students may cope with the needs of society. ICT is expected to fulfill some of the needs of the learner to function effectively in this world. (Kamat, V.2005).

REFERENCES:

Carlson, S., and Gadio, C.T.(2002). Teacher professional development in the use of technology. In W.D. Haddad and A. Draxler (Eds.), technologies for education: potential, parameters, and prospects. Paris and Washington, D.C.: UNESCO and AED, received April 25, 2005 from. http://www.schoolnet africa.net/fileadmin/resources/teacher_professional_Development_in_the_use_of_technology.Pdf.

Chanda Dey (2011). Use of ICT in improving quality and effectiveness of teacher training programme. International referred journal. Voi II

Dahiya, S.S(2005) ICT enabled teacher education, university news, 43 (18) May 2 to 8, 109 to 114.

Doma, Deoraj. (2009) International Diploma In Educational Planning And Administration. National University Of Education Planning And Administration. New Delhi.

Pacey, L.(1999). Integration of information and communication technology (ICTs) through teacher professional development: a comparative analysis of issues and trends in seven APEC economies, Canada: Judy Roberts and Associates Inc.

Robinson, B., and Latchem, C.(2003). Teacher education: challenges and change. In B. Robinson and C. Latchem (Eds.), teacher education through open and distance learning, London: Routledge Falmer, 1 to 27.

Bhattacharjee, B. (2016). Role of ICT in 21st centuries teacher education. International journal of education and information studies. 6 (1). <http://www.ripublication.com>

Department of school education and literacy. (2012). National policy on information and communication (ICT) in school education. Retrieved from [https://www.mhrd.gov.in/sites/upload_files/upload_document/Retrieved_policy% 20 document %20 of ICT.pdf](https://www.mhrd.gov.in/sites/upload_files/upload_document/Retrieved_policy%20document%20of%20ICT.pdf)

e_pgpathshala. (n.d).egpg.inflibnet.ac.in <https://epgp.inflibnet.ac.in/>