



ICT In Teaching: A Critical Overview

KEYWORDS

Information and Communication Technology (ICT), Internet, Computer and Teaching and Learning Process

Latika Thapliyal

Research Scholar, Department of Education, H.N.B. Garhwal (A Central) University, S.R.T. Campus, Badshahi Thaul, Tehri Garhwal.

Suraj Sharma

Research Scholar, Department of Education, H.N.B. Garhwal (A Central) University, S.R.T. Campus, Badshahi Thaul, Tehri Garhwal.

Prof. Sunita Godiyal

Professor, Department of Education, H.N.B. Garhwal (A Central) University, S.R.T. Campus, Badshahi Thaul, Tehri Garhwal.

ABSTRACT

The use of information and communication technology (ICT) such as Internet application, CD-ROMS, Video-Technologies and various computer attachments and software programmes have caused many changes in society as well as in field of education. Teaching profession has also been affected by the dimensions of ICT. Uses of ICT in teaching and learning process involve a number of senses and thus it can be a potential tool for enhancing teaching and learning process. It has many advantages over the traditional teaching and learning approach. However, every new technology brings with positive and negative impacts and it cannot be a substitute of good teacher and it has to be properly and judiciously used by the teacher and learner to reap the benefits. Therefore, in this paper authors are analyzing the positive and negative aspects of ICT in teaching and teaching -learning process.

INTRODUCTION-

The use of Information and Communication Technology (ICT) such as Internet application, CD-ROMS, Video-Technologies and various computer attachments and software programmes have caused many changes in society. These changes have not just been of technical nature but more importantly of a structural nature (Reid, 2002). Many of the major institution of our society have changed and the way we live our daily lives have been impacted. However, the impact on education may just beginning to be felt as teachers integrate this new technology into their teaching.

Access to new Information and Communication Technology will have a strong impact on the methodologies pertaining to teaching learning process (Prakash & Reddy 2013). Teaching using the internet like technologies does not by itself lead to achieving curriculum objectives, because part from assisting in class preparation, a good knowledge of internet allow us to make teaching effective. ICT should be seen as a tool that supports and enhances learning and not as a mean by itself. Many of the internet projects require students to communicate with students from different states or countries via electronic mail or mailing list or other newsgroups. Furthermore, the internet should be a part of integrated teaching system

ICT is a tool which if used effectively, can show learners that education is something which they can do for themselves and Development of ICT has provided new opportunities for delivering instruction in schools in innovative ways (Rathnabai & Viswanathappa 2013). To successfully use internet for teaching, we must know how to access the various services available through internet. Moreover, it has been reported that the majority of teachers who use the internet in teaching are those who believe that the internet is a new way of doing things. These teachers also use the internet for shopping and banking etc.

It is not the computer by itself but how they are used that makes the difference. Every new technology including ICT and its use bring with it positive and negative impacts.

Following is the discussion regarding the pros and cons of ICT with regard to teaching and learning process-

(A) How the ICT enhances and changes the teaching and teaching learning process?

The application of Information and Communication Technologies provides challenges to develop new teaching learning environments, new infrastructure and operational systems for learners, academic staffs and administrative supporting staff (Prakash & Reddy 2013).

We want to teach: using the internet because we want change, improve, add the new dimensions to our teaching and increase the quality of activities assigned to students.

New trends in teaching-

With the use of technology, the new trends in teaching are up coming. A numbers of things are done with Web sites, from giving students notes. Teachers should use power point and other computer programs to improve their presentation of material to class. Technology enables teacher to deliver more material to students and it also eliminated several basic problems such as; poor hand writing, poor artistic skill, lighting and visibility. Resource based teaching is almost becoming 'seamless, almost natural' in everything that teacher do because information is becoming easier to access with help of ICT. Through the use of technology teachers can provide opportunities for the students to learn think critically and discuss among their peers supported by ICT (Olsen 2000).

ICT Changes The Teaching Learning Relationship-

In age of ICT the relationship between teacher and learner is sometimes reversed. At present the students are very techno-friendly and techno-expert. Students help teachers in using technology. When student helps teacher, it gave the student a big confidence boost. Now we use the terms like 'co-learners' to describe the new relationship between teacher and student. The use of new technology may be increasing socialization in some way. People may be able to find someone who has interests similar to converse with,

through the internet.

ICT improves Teaching-Learning Process through Integration of ICT and Curriculum-

Lafarriere, Breuleux and Bracewell (1999) argue that there are significant benefits in using ICT as part of the teaching and learning process as long as teachers recognize the relationship between the use of ICT and the overall curriculum. Conventional teaching has emphasized content. For many years course have been written around textbooks. But today is a information age, now curriculum should be emphasize capabilities and to be concerned more with how the information will be used than what the information is (Syed N.). Integration of curriculum and ICT can improve teaching learning process.

ICT improves Teaching-Learning Process by improving Student's Achievement-

Robert (2000) looks at how the use of technology can enhance teaching and learning by improving student's achievement and improving access to a variety of education materials. ICT helps in expand access to education, strengthen the relevance of education to the increasingly digital workplace and raise educational quality. ICT helps students to learning by improving the communication between them and the instructors. Appropriate uses of ICTs in education have significant positive effects both on student's attitude and their achievement.

Technology proves effective only when they suit the teaching objectives and unique characteristics of the special group of learners. They should suit the age- level, grade-level and other characteristics of the learners; have specific educational value besides being interesting and realization of desired learning objectives (Sulochana 2012).

ICT enhancing the Quality and Accessibility of Education-

One of the most vital contributions of ICT in the field of education is easy access to learning. With the help of ICT, students and teachers can browse e-books, sample examination papers, previous years papers etc., as well as learning at any time, teachers can also finding the capabilities of teaching at any time. Mobile technologies support 24x7 teaching and learning.

ICT improves Teaching and Learning Process by improving Learning Environment-

ICT encourages learning; it motivates the individual and at the same time gives him (or her) the capability to do certain activities. Besides that, its presence betters the learning environment and enriches the learning experience (Punie, 2007). ICT presents an entirely new learning environment for students. Students are getting more information which improves the critical thinking, research and evolution skill. McPake, et.al (2005) have proved that the usage of ICT also develops the child's competences. ICT is not only an educational tool, but also a supporting one, because it helps to develop children with special needs and behavioral problems.

ICT improves Teaching and Learning Process by enhancing Motivation-

ICTs can enhance the quality of education in several ways by increasing learner motivation. ICTs especially computers and internet technologies, enable new ways of teaching and learning rather than simply allow teachers and stu-

dents to do what they have done before in a better way. ICT provides motivation to learn. ICTs such as videos, television and multimedia computer software text, sound and colorful moving images can be used to provide interesting and authentic content that will engage the student in the learning process.

B) Concerns Teachers Have About The Use Of Technology:

There are some concerns and problems with integrating the use of information and communication technology:-

Maintenance: The problem most often noted is the maintenance of the equipment needed to operate a technologically enhanced school.

Inequalities: Another problem is the disparities between students who have access to computer at home and those who do not.

Need of training: For integrating information technology into classroom teaching there is need of professional development of teachers. Information of new technology should be given to teachers by time to time.

Plagiarism: One of most important problem of ICT is plagiarism because technology is making easy to reproduce and revise someone else's work.

There is some other challenges in integration of ICT in teaching viz. limited ICT infrastructure, lack of information, technophobia among teachers, poor or non-existent internet connectivity, inadequate learning resources including related educational tools, high cost of maintenance and technical support as well as poor power supply.

CONCLUSION-

The use of ICT is changing teaching in several ways. With ICT teachers are able to create their own material and thus have more control over the material used in the classroom. With the help of technology teachers should be more creative in customizing their own material. Also, using Web pages to enhance an activity demonstrates that technology can be used to complement other aspect of good teaching rather than replace them. It is evident that involving students in creation of useful material as a part of a learning exercise is a way to make learning more meaningful for students. Though there are concerns related to the ICT in teaching learning process like lack of training of teachers, maintenance of equipment, plagiarism, lack of resources, poor internet connectivity etc but these can be tackled in long run. Though it is not a substitute of good teacher, but with the proper use it definitely enhance the teaching learning process. Further, ICTs are increasing at a very high speed, so the teachers after getting trained and after knowing the significance of ICT can incorporate new methodology in the teaching style instead of going to the traditional method.

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