The Role of ICT in Education

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Abstract: ICT's are potentially commanding tool for extending educational opportunities. There are many benefits of ICT both to the learners and teachers. They help in collaborative learning and are radical new ways of teaching and learning. ICT will also modify the role of a teacher who will have other skills and responsibilities other than classroom teaching. ICT has revolutionized the entire concept of education, learning. The paper is focused on the role of Information Communication Technology (ICT) in education. The paper is also focus on advantages and disadvantages of use of ICT in education.

Index Terms - ICT, Learning, Computer, Global, students.

I. INTRODUCTION

Today, 24×7 we are surrounded by technology, such as radio, television, computers, mobiles, android gadgets etc. Sometimes we are not even aware that we are surrounded by these technologies. Also we can call these are media. All these media comes under the overall umbrella of what are known as today's ICT. Knowing and using ICT's is important in today's fast changing knowledge society, but we very often are confused about what these technologies are. Communication Technology and Information technology that have very little difference and are interdependent. ICT includes both information and communication technologies. When these technologies are applied in the field of education, it is termed as ICT in education. In the era of the computer technology, the term ICT mainly focuses on the infrastructure, devices and sources of computer technology. ICT refers to technological tools which are used to create, communicate and manage information.

II. IMPACT OF ICT IN HIGHER EDUCATION CURRICULA

Education system had long supported and emphasized upon the importance of content. A curriculum was based on the text and teachers taught through lectures, tuitions and different learning activities. ICT integration has redesigned curricula that promote performance and competence. It is more concerned about how the information is used instead what the information is. The proliferation and widespread use of ICTs have removed many restrictions and impediments. Their availability has made sharable resources accessible both to the students and teachers.

III. ROLE OF ICT TO EVALUATE TEACHERS EDUCATION

In almost all sector of education the role of teachers is changing. They are not only transmitter of knowledge but also a facilitator of teaching learning process. New applications of technology are introducing new possibilities for teaching and learning. The traditional boundaries of the classroom are giving way to virtual learning and online courses.

- Technology invites learners to be more independent and the curricula to be more dynamic. Teachers need to complement their content and pedagogy expertise by utilizing online facilities.
- ICT brings changes in classroom practice making the teachers to familiarize themselves with possibilities, approaches and applications in the used of ICT.
- The increasing use of technology has brought changes in the modes and methods of instructional process which are becoming more learner centered. Teacher education programs at pre-service and in-service levels have ample scope for inducting pedagogical skills and management of technologies as important components of teaching learning environment to enhance efficacy to transaction.

IV. ROLE OF ICT IN DISTANCE EDUCATION

Nowadays, distance education programmes and Universities use ICT to deliver the content to the students. These includes broadcast audio and video such as radio and television programs, audio and video tapes delivered to students as part of a learning kit and in more recent times, multimedia content such as lessons which are delivered offline, i.e. on CDs/DVDs. This is also sometimes called multimedia education, where multiple media are used to support learning.

V. ADVANTAGES OF ICT IN EDUCATION

In case of students following are the advantages of ICT.

- Higher quality lessons through greater collaboration between teachers in planning and preparing resources.
- Increased access.
- Flexibility of content and delivery.
- Combination of work and education.
- Learner-centered approach.
- Higher-quality of education and new ways of interaction.
- Improved pastoral care and behaviour management.

In case of educational institutes following are the advantages of ICT.

- Increases the cost effectiveness of education and training systems.
- To reach target groups with limited access to conventional education and training.

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- To enhance the quality of existing educational structures.
- To promote innovation and opportunities for lifelong learning.

VI. DISADVANTAGES OF ICT IN EDUCATION

- High infrastructure and startup cost not easy to maintain.
- Tend towards centralized uniform content in economies of scale.
- Are not ideally location and problem sensitive.
- Problems of reach and access.
- Tend to create new class of knowledge rich / knowledge poor.
- Essentially delivery systems.
- Hard to assess impact.

VII. CHALLENGES OF ICT USE IN EDUCATION

- The cost of acquiring, installing, operating, maintaining and replacing ICT is very high.
- Dearth of appropriate rooms and buildings to house the technology.
- Absence of teaching learning materials in local language.
- It may create a digital divide within a class where some students are more familiar with ICT. In such cases they will reap more benefits then those who are less technology savvy.
- It may create marginalization for those who are disadvantaged and undeserved.
- It may result in lesser opportunities for underprivileged due to poverty and lack of education.

VIII. CONCLUSION

ICT has created large impact on our educational system. It will be beneficial for all the stake holders of education in the long run. It will help in collaborative learning and make the teaching learning process more interesting creating a long lasting impact on the minds of the learners. The use of ICT holds a lot of potential. It will result in sustained development. The upshot of all this activity is that we should see marked improvements in many areas of educational endeavor.

REFERENCES

[1] Ahmed, S. and Singh, M., Multimedia in Teaching Education Empowering Accessible, Flexible and Innovation Learning, Shiksha Shodh Patrika, Vol (04).

- [2] Ghosh P.P., Modern Education Technology, Avishkar Publishers, Jaipur.
- [3] Kaur G.S., Integration of ICT in Teacher Education, The Centre for sustainable development.
- [4] Mikre, F.; The role of ICT in Education, (July2011).