

PRACTICE OF ICT: EMPOWERING TEACHERS FOR QUALITY EDUCATION

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Abstract:

Teachers are living in a time where rapid changes are seen in common place and professional practice; this is due to technological innovation, practical initiatives and economic stability. The implementation of Information and communication Technology in teaching practices the most important changes seen around. CT is a vital tool for participating in the knowledge society. It a major factor in shaping the new global economy and producing rapid changes in society. The role of teacher is being changing from an instructor to facilitator now as a creator of learning situation. A teacher with technology is the need of the hour and it can be done when teachers are well equipped in information and communication technology, latest knowledge in their subject by undergoing orientation, refresher courses, seminar, management skills, communication skills and good qualities. A teacher should be skilled in computer as well as in pedagogical application which helps in teacher empowerment, directly and indirectly it enhances learning and improves the quality of education. It is the present requirement of the modern information and communication. A techno teacher should integrate electronic media, content with technology in the classroom. ICT focuses the teacher to look beyond the textbook and traditional methods. It helps students to think independently communicate creatively. It also helps students for building successful careers and lives, in an increasingly technological world. It is possible when teachers improve their quality of teaching through ICT.

INTRODUCTION

We are living in a digital era. It is very difficult to think of any event in our daily life that is not using Information and Communication Technology. It applicable in all sector including educational institutions. That is it meant for use technologies in teaching and learning. These includes not only traditional technologies like radio and television, but also include modern ones like cellular phones, computer and network, hardware and software, satellite systems and so on, as well as the distinctive services and applications associated with them, such as videoconferencing. ICTs stand for information and communication technologies are defined, set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information. It includes technologies primarily on communication technologies includes the internet, computers, broadcasting technologies, wireless networks, cell phones, and other communication mediums. Modern technologies brought an effective podium for the education in the present and it helped to better interaction in the teaching learning process. Through the use of computers and internet the teachers can empowered better and also it will enhance the quality of education. Information and

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communication technologies (ICT) provide a variety of tools that can open up new prospects in the classroom. They can particularly help to mould the educational process to individual students' needs, and provide learners with the pivotal digital competences needed in our knowledge-based economy. The introduction of ICT in the higher education has great implications for the entire education process. This provides a technology and that has the capacity to upgrade and encourage the transformation of education from a teacher directed enterprise towards student centered models.

FUNCTIONS OF ICT IN EDUCATION

a) Information and communication Technology as a change agent in the learning process.

In the conventional learning, preference was given on contents because that follows the particular course structure or syllabus and the subject wise textbooks and reference books have been written. CT has major importance in the educational system and social transactions by improving the students and teachers work, learn, play etc. It motivates the students for learning. It will create the positive impact and change on education like student motivation, changing classroom interaction etc.

b) The Impact of ICT on place when and where to learn

Information and communication technology provide good opportunity for students to undertake education anywhere, anytime and at any place. It facilitates access to resource persons, experts, researchers, professionals, business leaders etc. all over the world.

c) Improve the Quality of Education

Information and communication technologies are used in education to assist students to learn more effectively and it provide teachers to different methods and techniques of teaching and also it encompasses

the effective use of programs to access, retrieve, store, organize, manipulate and present data and information (Dabbagh, 2007). The student can engage in learning through videos, television, and multimedia computer software etc. It will enhance the quality of education.

d) ICT enhancing educational Management

Through ICT the administrative functions to be improve as much better, as it giving faster administrative transactions. Different computer software programs are being used in time tabling and school management to improve the use of staff time, student time and space, thus reducing costs significantly thus the schools can improve quality with less cost Modern ICTs have a very large potential for teacher education in larger quantity and better quality.

ROLE OF ICT IN HIGHER EDUCATION

ICT empowering the technology in the field of education and it increase the knowledge of students. So, the role of ICT in the education at higher level is inevitable. I It will be helpful to improve qualify and flexibility, the widening access to the teaching and

learning. It will increase variety of educational services & medium and promote equal opportunities to obtain education & information and it helps to developing a system of collecting and disseminating educational information by promoting technology literacy

How to Empower Teachers Using ICT?

ICT is an attempt to improve the quality of education and teachers are the centre of it. Teacher empowerment become the indispensable part of the restricting the educational structure. Teachers can utilize variety of apps or trusted online resources to enhance the traditional ways of teaching and to keep students more engaged. Grading software, online assignments and virtual lessons helps teachers to save a lot time. This valuable time can be used for working with students who are struggling. What is more, having virtual learning environments in schools inflates collaboration and knowledge sharing between teachers. Teachers can easily represent their lecture. Reduces teachers their isolation in their work by communicating electronically with their colleagues' it will enhance professional development through personalize the education experience and the teachers can introduce different teaching method.

1. It is helpful in the professional growth and development of the teachers. A teacher can learn various skills with the help of information and communication technologies. Through the certification programs teachers can increase his or her capacity to teach subjects make easy, economic and understandable. Their works by using ICT provide opportunistic to grow teachers as professionals and to learn continuously and also expand their knowledge and skills too.
2. A teacher can increase his domain of Knowledge with the help of e-journals, e-magazines and e-library etc. and that can be achieved only through the use of ICT. He can also participate in discussions and conferences with the experts using this knowledge. CT helps teachers can schedule their work and curriculum etc.
3. Teachers can feel others respect their knowledge in ICT helps a teacher to learn and adopt innovative methods of teaching. It will enhance the status of the teacher.
4. ICT helps to create the self-efficacy of teacher by participating in various in-service training programs and workshops this will increase the skills and ability of the teachers and this helps to students learn effectively and efficiently. ICT helps a teacher to guide his students about learning materials available on internet, e-books, e-journals, e-magazines etc.
5. Through the use of ICT teachers can feel that they are worthwhile for their schools and they can do various for the accomplishments.

How to Improve the Quality of Education through ICT?

Motivation to learn: -It helps students to do things with interest.it helps the engage of student in learning process. Networked computers with internet increase students' motivation through different ideas and techniques. It assists the students to learn more effectively.

Facilitating the acquisition of basic skill: It helps the students to order the thinking skill. It develops the basic skill of learner like numeric skill. Ait also enhances the english language skill of students by the use of techniques like radio, TV, social media, online language training courses etc

Enhancing teaching training: It helps teachers with access to a wide range of new pedagogy. These technologies are also being used to enable teachers to do administrative tasks more efficiently. It improves teaching and also enables students to have more informed and more profitable access to teachers' knowledge and skills.

WAYS OF TEACHERS TO ADOPT TECHNOLOGY

The teachers that technology will empower the teacher and help their students to learn. The following strategies for an empowered teacher adoption of education technology.

Teachers should treat as the adoption of technology as part of lesson planning. Teachers can incorporate the technology directly into their teaching practice, it helps the teacher to do work effectively and efficiently.

Schools must use technology that empowers teachers. Teachers rightly reject education technologies that divert their attention from instruction. The good education technologies enable teachers to do more things with fewer resources. Teacher-empowering technologies like mobile apps that grade written student work and provide lesson plan databases.

Use videos in classroom and provide students access to those videos at home: -Use of effective videos is mode to grasp student attention. As like organise Video conference with students from different schools helps students to open up their minds on life.

Teacher students interact with teachers and peers beyond the classroom: -ICT giving the opportunity to students to interact with the teacher regarding the various problems he or she facing in class.

Teachers should not fear open-source technologies. Some believes that education technologies are too economical and complicated to use. Open-source technologies are stable, secure, and compatible with other platforms.

Use educational games to teach concepts: -Educational games can be great way to provoke interest in children to start learning.

Conduct simple online test and assignments: -Creating simple online test can be grate time saver for the teacher because it takes less time and effort in creating and implementing questions can be used to create online test for the future batches.

Use online education portfolios to evaluate students. Portfolios allow students to squeeze out the creativity for difficult to assess subjects. Teachers can adopt from a variety of online portfolio providers tailored to the needs of their classroom. Teachers also serve as a platform for students to demonstrate growth.

Teachers should embrace the Common Core State Standards. Common standards make

teaching easy. Teachers have to write lessons that comply with district, state, and national standards. Having a single set of standards removes redundancy and conflicting guidelines. Furthermore, universal adoption of common standards will support future technological innovations that aid teachers. From a technical perspective, standards facilitate the development of new technologies.

Common Educational Application of ICT

One laptop per child: The laptop designed for schools on one is to one basis at lower cost with the features like lower power consumption low-cost operating system and special reprogramming and network functions.

Interactive white board or smart board: It allows projected computer images to be displayed, manipulated, dragged or copied. Hand written note can be taken from the board and saved it for future purpose. It associated with whole class instruction rather than student centred activities.

Tablets: It is a small personal computer with touch screen allowing input without keyboard and mouse. Inexpensive software can download on to tablets and it is versatile tool for learning.

E-readers: It is a electronic device that can hold hundreds of books in digital form and it can be used teachers and students in their teaching learning process.

Flipped classroom: It is an instructional strategy and a type of blended learning that reverses the traditional learning environment by delivering instructional content, often online, outside of the **classroom**. It moves activities, that may have traditionally been considered homework, into the classroom.

BENEFITS OF ICT

Information and Communication Technology as a teaching tool. Its improves the quality and standards of pupils.

Benefits to Students:

Students using voice communication aids gain confidence and social credibility at school in their communities, Increased ICT confidence amongst students motivates them to use the Internet at home for schoolwork and make their curiosity fulfil, Computer can improve independent access for students to education, Students with profound and multiple learning disabilities can easily

communicate more, visually impaired students using the internet can access information along their sighted peers. ICT enables the students to demonstrate achievement in ways which might not be possible with traditional methods, it promotes the learner autonomy.

Benefits to Teachers:

1. Using the ICT gadgets teachers can easily represent their lecture.

2. Teachers make interesting and fruitful their teaching by using ICT and also, they can easily stores and records in computers.
3. Reduces isolation of teachers working in special educational needs by enabling them to communicate electronically with colleagues,
4. Enhances professional development and the effectiveness of the use of ICT with students through collaboration with peers, improving the skills of staff a greater understanding of access technology used by students.
5. Through ICT images can easily be used in teaching and improving the retentive memory of students
6. Teacher easily explain complex instructions and ensure students comprehension.
7. Teachers are able to create interactive classes and make the lessons mor enjoyable which could improve students' attendance and comprehension.

IMPORTANCE OF ICT IN EDUCATION

- It is reliable and provides interactive learning experiences and create personal learning environment.
- ICT provide technology enhanced learning. It is flexible and provides comfortable learning.
- Make good learning environment thus it motivates students to learn.
- It facilitates communication and promotes creativity.
- It also provides access to the digital library where information can be retrieved and stored beyond textbooks.
- It implements the principle of life-long learning or education.
- It increases a variety of educational services and medium and method.
- It promotes equal opportunities to obtain education and information.
- ICT develop a system of collecting and disseminating educational information.
- ICT helps to develop distance education with national contents.

BARRIERS OF TEACHERS IN THE USE OF ICT

- Lack of teacher confidence
- Lack of teacher competences Resistance in change in the negative attitude
- Lack of time
- Lack of effective training
- Lack of accessibility
- Lack of technical support.

- Expensive

CONCLUSION

Education has an important role in building a good community. For that number of teaching learning technologies are used, that will enhance knowledge of teachers and students also empower the teachers as better. ICT focuses the teacher to look beyond the textbook and traditional methods. It helps students to think independently communicate creatively. It will increase the quality of education by increasing learner motivation and facilitates acquisition of basic skills. Now a days teachers are the virtual guide for students. ICT have immense potential for knowledge dissemination, emphatic learning, and provide well organised education services. ICT is best used when it empowers teachers and students to create personalized, exposed, creative learning experiences.

REFERENCES

- Aggarwal, S., & Jca, O. (2010). *Teacher and Education In A Developing So*. Vikas Publishing House.
- Asongu, S. A., & Odhiambo, N. M. (2019). Enhancing ICT for quality education in sub-Saharan Africa. *Education and Information Technologies*, 24(5), 2823-2839.
- Blase, J., & Blase, R. R. (2001). *Empowering teachers: What successful principals do*. Corwin Press.
- Condie, R., & Munro, B. (2007). British educational communications and technology agency (BECTA), corp creator. *The impact of ICT in schools: Landscape review*.
- Dabbagh, N., (2007), The Power of The Internet for Learning: Moving from Promise to Practice. *Educational Technology*, May-June, 29-35.
- Dawes, L. (2001). What stops teachers using new technology? In L. M. Leask (ed.), *Issues in Teaching using ICT* (pp. 67-79). London: [J]. Routledge. Ertmer, PA (1999). *Addressing first-and second-order barriers to change: Strategies for technology integration. Educational Technology Research and Development*, 47(4), 47-61.
- Farrell, G. (2007). ICT in Education in Kenya. *Survey of ICT and education in Africa: Kenya Country Report*. –April.
- Kasirajan, V., & Asvini, M. Y. J. THE FUNCTIONS OF ICT IN EDUCATION SEGMENT. *AKCE QUEST*, 17.
- Moshood, T. D., Nawanir, G., Sorooshian, S., Mahmud, F., & Adeleke, A. Q. (2020). Barriers and benefits of ICT adoption in the nigerian construction industry. a comprehensive literature reviews. *Applied System Innovation*, 3(4), 46.