ICT in Teaching Learning Process

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ABSTRACT

Information and communication technologies (ICT) at present are influencing every aspect of human life. They are playing salient roles in work places, business, education, and entertainment. Moreover, many people recognize ICTs as catalysts for change; change in working conditions, handling and exchanging information, teaching methods, learning approaches, scientific research, and in accessing information communication technologies. In this digital era, ICT use in the classroom is important for giving students opportunities to learn and apply the required 21st century skills. ICT improves teaching and learning and its importance for teachers in performing their role of creators of pedagogical environments. ICT helps of a teacher to present his teaching attractively and able to learn for the learners at any level of educational program Today in India teaching training programs making useful and attractive by the term of ICT. Information and Communication Technologies (ICTs) exemplified by the internet and interactive multimedia are obviously an important focus for future education and need to be effectively integrated into formal teaching and learning – especially in a teacher education institution.

Keyword- ICT, Teaching learning, environments, Technologies, Telecommunication, Skills

Introduction:

ICT stand for information and communication technology and are defined for the purpose of this primer as a diverse set of technology and resources used to communicate and to create this eminent store and manage information this technology includes computers the internet broadcasting technology radio and TV and telephone in different years there has been grounds well of interest in how computers and internet can be hardest to improve the efficiency and effectiveness of education at all levels and in both ICT includes Products that could store process transmit convert duplicate are received electronic information electronic textbook instructional software e-mail chat and distance learning program etc. It is difficult and maybe almost impossible to envision future education without technology as we all live in globalized era we can see technology changes happening around us they have create a new global economy supported by technology information and knowledge the emergence of this new global economy has its influence on educational institution

also as the access to information Continuous to grow by rapidly educational institution cannot be connected with the limited knowledge to be transmitted in a period of time they have to become comfortable with the evil expanding knowledge and also be acted with the technology to deal with his knowledge in this connection technology like radio and T.V. as well as New year digital technology such as computer and the internet have been proven as essential tool for educational change and reform when used appropriately different technology can help expand access to education is strength in the 11th of education to the increasingly digital workplace and rays quality by helping make teaching and learning in and active process connected to in this module we will get an overall idea about the concept of information communication technology we will also discuss about the significance about ICT in education and its scope.

Education is the development of the power of adoption to an even changing social environment

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it is a science of doing getting things done related to any art are science or society continuous to be affected significantly by technology and its application in very expect after lives education is no exception to it ICT are now considered as a back bone of education system

ICT in education:

ICT is being utilized in every part of life due to the increasing importance of the computer students the future citizen cannot afford to keep themselves a loop from the dispotential medium in education huge of ICT has become imperative to improve the efficiency and effectiveness at all levels and in both formal and nonformal setting education school stage has to provide computer instruction Pro found technical knowledge and positive attitude towards the technology are the essential prerequisites for the successful citizens of the coming decades. It can be used for the following purposes-to broadcast material online facility or CD ROM can be used as source of information in different subjects to facilitate communication for pupils with special needs to use electronic twice to develop spatial awareness and psycho motor control to use the online resources like email, chat, discussion forum to support collaborative writing and sharing of information. Video conferencing or other form of teleconferencing to involve with range of a student from distance. Geographic areas. For blended learning by combining conventional classroom learning with e-Learning system. And assessment data. To exchange and share ideas among teachers for the professional growth. Carry out internet best research to enhance educational process.

Role of Teachers:

ICT provides information, facilitates information processing, and supports problemsolving and collaborative learning. Will the role of teachers then become redundant? The National Policy on ICT use in Schools envisions the need for teacher education for ICT-mediated teaching and learning. The UNESCO (2002) has developed frameworks to guide teacher education program for making teachers capable of using ICT in schools. The teacher therefore needs to continue playing a crucial role in ICT-mediated teaching and learning but the role is being redefined because of the changing context of ICT use in education and the realization of the potential of ICT to align teaching and learning with the knowledge society requirements. India's National Policy on ICT in School Education says that teachers will participate in selection and critical evaluation of digital content and resources and also develop their own digital resources. The UNESCO (2002) requires teachers to carry out technology infusion in the instructional practices through planning, implementing and managing instructions, assessing and evaluating learning, and move towards more student-centered approaches from a stage when it is used to support traditional teaching and learning; use ICT for creating networks, for seeking and sharing resources with professionals and the community; be aware of the moral and legal aspects of ICT use like copyright, intellectual property rights, and an understanding of health related issues emerging from prolonged ICT use like the impact on eyes, posture, general fitness, etc.; select appropriate technology and update their ICT skills to keep pace with the emerging technologies. Therefore the teacher has many roles to play.

Significant of ICT on Education:

1. Cost effective:

ICT reduce the cost of education from very high to very low goal of mass education can be fulfilled by integrating ICT in education even though the initial investment is high. it is definitely very cost effective option for longer period as it reached to the masses.

2 Distance and climate in sensitive:

It does not matter where you are or how the weather is you can still access and learn from ICT, with the advancement of ICT education does not remain restricted within 4 walls of the educational institution student from different parts of the world can learn together by using online off-line resources this

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would result in the and reaching learning experience is it also solve the problem of geographical barriers.

3. Individualization of learning:

ICT allows each individual to relate to the medium and its content ICT enabled to cater to the individual needs of the students as per their availabilities and interest crowded classroom have always been a challenge for the teacher to consider the needs of every student in the class for example the help of online tutering and computer assisted instruction students can be given into lizard instruction.

4. Uniform quality: The content is well produced and is of good quality the same quality can be delivered to the rich and poor the urban and the ruler equal and at the same low cost.

5. Teaching learning process interesting: ICT can be utilized for better teaching learning process and improving quality of education using multimedia in education results in the increasing productivity and retention rates because people remember 20% of what they see 40% of what they see and hear but about 75% of what they see and hear and do simultaneously.

6. Provide a variety of tools and technology; There are various ICT tools available which can be utilized for the knowledge creation and dissemination in the modern world tools include radio TV Internet mobile phone computer laptop tablet and many other hardware and software application certain ICT tools like laptops PC mobile phone and PDS have their own implication in education and training for teachers and student

7. Shift of the focus on learning- ICT has contributed in shifting the focus on learning than teaching ICT helps to explore knowledge to learn the content through self study the teacher can help the student by the insuring the right direction towards effective

8. Quick access to update information: information can be assessed in seconds by connecting to the internet and suffering through web pages this help the students to learn the update content teachers to can keep themselves a breast of the latest teaching learning strategies and related technology.

9.Wider learning opportunities for pupils: application of the latest ICT education has provided many options for the learners to opt for the course of their choice many online courses are available for them to select any as per their aptitude and interest student can evaluate their own progress through different quiz ready to use online tests.

ICT Uses the following Digital Technologies:

- 1. Camera (Audio/video conferencing)
- 2. Internet /Intranet
- 3. www
- 4. Online databases
- 5. Discussion forums
- 6. Vlogs, Blogs
- 7. Digital libraries
- 8. Newsgroups
- 9. Chats
- 10. E-books
- 11. E-mails
- 12. Storage devices (CD, DVD, HDD)
- 13. Cell Phones (smart phones)
- 14. E-Journals
- 15. Telecommunications
- 16. Virtual reality

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- 17. Interactive TV, Radios
- 18. Projection devices

Scope Of ICT in education:

Teaching learning process Evaluation Research Administration

Challenges and issues in using ICT- The tutor may face various challenges and issues to effectively used information and communication technology in

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— Ideal Research Review

teaching and learning process the various challenges that the teacher may encounter or as follows.

Challenges: Challenges is defined as any condition that makes it difficult to make progress are to achieve and objective integration of ICT in teaching learning process may progress various difficulties due to:

- 1. About the use of technology
- 2. Limited access and network limited technical support
- 3. lack of teacher competency
- 4. lack of attitude of teachers and students

Issues -In this global age there are number of issues that the technical education system of our country are facing today is which are something which raise is a problem or challenges are gives a certain view or direction regarding the matter the important issues to be addressed as follows.

- 1. Global competition and changing industrial scenario.
- 2. Paradigm shifting educational pedagogical learning opportunities to teacher and learners.
- 3. increasing ability of information and communication technology for education training and academy concern of teaching and learning process.

Conclusion:

In this way we have learnt about the potential of ICT it can empower increase in hands and enable effective use to support and transform the teaching and learning process some of important benefits of using ICT is for teaching and learning and educational management it can be used for the managing infrastructure of the institution the cost effectiveness constituency media rich content repeatability and easy to monitor the important attribute for enhancing teaching and learning process is it brings about a change in role of teachers as facilitator we have also seen the challenges and issues of ICT in teaching and learning. ICT has brought remarkable changes in the 21st century in teaching learning. Process. the effective integration of technology into classroom practices poses a challenges to teachers and learner. The above study indicate that teachers and learners have strong desire for the integration of ICT into education but they encountered many barriers to it. These findings therefore have application for training the teachers to become regular uses of ICT focusing and acquiring basis ICT skills with that ICT successful integrated in education and then it enables wide or learning opportunity into teaching learning process.

References:

- 1. http://learningportal.iiep.unesco.org/en/issuebriefs/improve-learning/information-andcommunication-technology-ict-in-education
- 2. https://www.researchgate.net/publication/ Role_of_ICT_in_the_Process_of_Teaching_and_Learning
- 3. https://files.eric.ed.gov/fulltext/EJ1096028.pdf
- 4. http://learningportal.iiep.unesco.org/en/issuebriefs/improve-learning/information-andcommunication-technology-ict-in-education

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