Using ICT in Teaching and Learning in New Ways

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Abstract: *The purpose of this paper is to discuss creative ways to include ICT into the teaching and learning process. ICT facilitates understanding of complex processes through simulations, which again contribute to a realistic learning environment. ICT may thus serve as a facilitator of higher order thinking and active learning. Information and communication technology integration may energise both educators and pupils. By offering curricular support in challenging topic areas, this can aid in improving and developing the quality of education. Students enjoy studying and the independent inquiry that provides innovative and proper usage of ICT helps them adopt ICT because teachers create engaging and meaningful learning experiences for their students. Through the efficient use of this technology in the classroom, students and teachers can practise various ICT skills and gain knowledge of its advantages. ICT can be used to enhance the learning and teaching process. This novel strategy may be adapted to meet the teaching requirements of the students in a classroom setting. It is a fact that the only option available to instructors is to use technology as an integrated tool in the classroom. As a result, a teacher might be referred to as a "Teaching Technician" as the pupils are not solely dependent on their teachers.*

Keywords: ICT, Teaching

I. INTRODUCTION

Teaching and learning specific skills are included in education, as well as something less concrete but more profound: the transmission of information, sound judgement, and mature wisdom. The transmission of culture from generation to generation is one of education's core components. Education is the process of encouraging a person to realise their own potential and abilities. It is a pedagogical application, which is a collection of theoretical and practical study pertaining to teaching, learning, and the environment is deteriorating, the globe is becoming more interconnected, and technology is constantly changing how we interact with information. We must reconsider what we learn, but much more crucially, how and where we learn it in light of shifting global realities. For the twenty-first century, we require education.

1.1 Definition of ICT

Information and communication technology (ICT) refers to a category of technology used in the form of tools, equipment, and application support that aids in the accurate and efficient collection, storage, retrieval, use, transmission, manipulation, and dissemination of information for the purpose of enhancing user knowledge and improving communication, decision-making, and problem-solving skills.

1.2 Technology's Importance in the Teaching and Learning Process

By accommodating the various learning styles that students have, technology has made learning easier for them. Before the introduction of technology in the classroom, teachers had to spend numerous evenings planning lessons, practising their 3D-graphics skills on students, and then repeating the lesson's main ideas to the class. The teacher's use of technology in the classroom helps close the "generation gap" between him or her and the students by giving them the impression that they are keeping up with the times and that their teacher is adequately preparing them for 21st-century abilities.

1.3 Dimensions of Technology-based Learning and Teaching Strategies

Teachers now conduct their lessons in the classroom using technological media. Every teacher should use various forms of educational technology into their lesson plans.

- **Electronic learning**: The student and the learning process should be the main emphasis of electronic learning. E-learning entails more than just the presentation and delivery of the contents via the internet. It is also referred to as online education.
- **Ubiquities Learning**: This term refers to "learning everywhere." It delivers on the promise of "anytime, anywhere, and any context" made by e-learning.
- **Virtual learning:** All educational activities that take place in non-contiguous environments where students and teachers are segregated are referred to as virtual learning.

1.4 ICT's advantage over conventional pedagogy

- Teachers can give students the contextual signals they need to understand new topics by introducing pictures or videos into the session.
- The essential link or scaffold between common language and more challenging academic language can be provided by visual information.
- Electrically generated resources are superior to textbooks and other static sources of information because they may be enhanced by user feedback or by allowing users to directly alter them.
- Students can use technology to demonstrate what they have learned in various assessments of their development.

1.5 ICT Benefits for Teaching and Learning

The use of ICT in the teaching and learning process has a huge number of advantages, which are outlined in the following way

- Increases productivity in both teaching and learning.
- It improves motivation.
- Creates space for personality growth.
- Students' active involvement
- Self-directed education.
- Multisensory learning environment.
- A very adaptable and abundant informational medium for kids.

Teachers have the following duties regarding the use of ICT in the teaching and learning process

- To be aware of the internet resources that are accessible to facilitate teaching and learning.
- Develop exercises that are appropriate for each student group and choose resources based on their content to create possibilities for improving both language and digital abilities.
- It's important to keep track of the abilities needed to survive in the digital age, such as reading and writing digital text as well as conversing and publishing online.
- Digital literacy is implemented effortlessly and comprehensively.

Effects of ICT use in the teaching and learning process

Teachers may plan and prepare lessons more effectively and quickly when they use ICT effectively. Teachers develop their facilitation skills. It encourages an integrative approach. The teaching and learning industry becomes more focused on results. Assist the teachers in directing the needs and exploration of the students during the learning process.

ICT use restrictions in the teaching and learning process

The school does not have ICT facilities. Teachers, institution leaders, and other educational authorities exhibit a pervasive ignorance of the use, applications, and advantages. Teachers are afraid of losing control of the teaching and

learning processes, which causes them anxiety. Teachers do not wish to move to new methodologies or switch over to them. Many students oppose changing their position from the passive to the active independent research and knowledge discovery

II. CONCLUSION

As a result, we may conclude that ICT use has enormous potential for training pupils to handle a variety of tasks and responsibilities. In the context of today's educational system, there is transition, transportation, and revolution. Therefore, teachers must understand that if they want their pupils to reach a high level of proficiency, they will have to accept technology as an integral tool in the classroom.

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