

Role of Technology: Enhancing the Quality of Teaching

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Abstract

The era of 21st century is often regarded as the era of technology. Today, technology plays an important role in our life. It is possible only through technology that distances are no more barriers and education can be brought to the student's doorstep. The impact of technology can be felt in every possible field and one such field is education. Technology provides a unique opportunity to touch the lives of everyone in this modern society. Technology is an important instrument, which can transfer the present isolated teacher- centred, book- centred learning environment in to rich student-centred environment. Technology is a branch of developed science in which software and hardware is used. H.J. Leavitt says, "Technology is a problem solving invention" Technology is the mechanization of educational process which helps in preservation of knowledge, transmission of knowledge talk 'only. The term "education" is defined as a life- long process. The objective of education is the all round development of a man and technology plays an important role in achieving this end. Our life cannot be imagined in the absence of technology. Today students demand the better teaching and learning. Smart classroom, internet, computer, tele-conferencing all these are now the part of education system. Only conventional teaching aids cannot satisfy the needs and curiosity of the learners. Technology helps in many ways to make the education system perfect. Distance education would not be possible without technology as material provided to the students is used to prepare directly or indirectly with the help of technology. Technology appeals to maximum senses. Conventional teaching makes the class room dull and boring. Technology would be of great help if properly used by a teacher. It helps in the best preparation and is time saving and energy saving. It is said that a picture is better than thousand words. In the past student have to cram the subject-matter but now he is no more a crammer but a learner, and technology makes a concept so interesting and appealing that it gets automatically stored in the brain. Technology provides a strong platform to make education system perfect Technology is a new paradigm of the teaching-learning process; we must accept the new technology and use ICT as a tool of teaching-learning process. Technology aims at transferring the old traditional paradigm of learning to the new paradigm of learning. Today's more than ever , the role of education technology in teaching is of great importance because of the use of the use of the information and communication technologies. Educational technology is the systematic process of conceptualizing the execution and Evaluation of the educational process. This paper is a conceptual attempt to explore the new roles of technology in education which has increasingly become more than a sole medium, as was its description in the past.

INTRODUCTION

Education one of the most important processes in today's society. As education is generally regarded as the key to national development, proposals for nation building have included the reform of inherited educational system. Present education system served us well when a professional skill was good till retirement. Quality teaching is the use of pedagogical techniques to produce learning outcomes for students. It involves several dimensions, including the effective design of curriculum and course content, a variety of learning contexts, feedback and effective assessment of learning outcomes. Technology is the need in the very field. It makes things easier and efficient. The use of technology in education system is much labour saving and cost effective. The present the era is that of science and Technology. In the field of education, The technology is concerned with that practical science which provides an approach to teaching and learning. Technology provides opportunities for students to be very creative and innovative. **Smart class Multimedia, Creya learning, Virtual Classroom**, are very popular educational software which makes teaching and learning much better. The technology also helps to deciding the curriculum, aim of education, school records, library, examination and evaluation system. Information and communication technology is an important instrument, which can transfer the present isolated, teacher-centred, book-centred learning environment into rich student-centred environment. Information and communication Technology (ICT) is a diverse set of technological tools and resources used to communicate and to create, disseminate, store and manage information.

ICT is a new paradigm of the teaching-learning process; we must accept the new technology and use ICT as a tool of teaching-learning process. ICT aims at transferring the old traditional paradigm of learning to the new paradigm of learning. It acts as the gateway to world of information and teacher to be updated. It is an effective tool for information acquiring. ICT includes web TVs, Net PCs, computer, audio and Web-Based Education that offers accessibility, flexibility and innovativeness in teaching and learning. ICT can play an important role in the preparation of quality teacher. Through the help of ICT, the pupil teacher can get latest knowledge regarding education.

We may define good teaching as instruction that leads to effective learning, which in turn means thorough and lasting acquisition of the knowledge, skills and values the instructor or the institution has set out to impart. Most students cannot stay focused throughout a lecture. After about 10 minutes their attention begins to drift, first for brief moments and then for longer intervals and by the end of the lecture they are taking in very little and retaining less. Students' attention can be maintained throughout a class session by periodically giving them something to do. Many different activities can serve this purpose of which the most common is the small- group exercise.

Teaching and Learning are also a very complicated area of education system. Today, traditional methods like lecture method discussion method questioning method are not sufficient to make the students clear the content it needs some new technical methods. Here technology helps the teacher a lots. Today, smart class, computers projectors and

other technical teaching aids are very much helping the teachers to teach the contents and students to learn the things very easily.

There are various technologies that can be introduced in the education system to make it better. Some of them are as follows:

- Technology of interactive whiteboards, which have the capabilities of connecting immediately to the internet so students and teacher can access information immediately. By connecting the whiteboards to a laptop, computer and projector, teacher can also convert free hand writing on the whiteboard into texts and then print it for students.
- Video conferencing or smart classroom technology is an integral, part of the connected or smart classrooms, which allows students to talk to experts and other schools and students around the world in real time via a video link-up the facility is linked to the connected classroom package and uses electronic whiteboard technology.
- Virtual classroom, a computer accessible, online learning environment intended to fulfill many of the learning facilitation roles of a physical classroom. Instead of going to specific classes in a person, teachers and students could communicate at a time they can choose by exchanging printed or electronic media such as emails, message boards or through technology that allows them to communicate in real time such as telephones, web conferencing or video conferencing.
- E-learning, environments available to all student with anywhere, anytime access through very easily. The learning provides materials and resources such as digital images, sound files, video, online courses and lesson as well as hosting events such as chat, collaborative projects. The use of e-learning in itself does not constitute an enhancement of the quality of teaching and learning, but it is a potential enabler for such enhancement.
- Digital devices likes cameras, scanner can be used for instruction. Digital photographs and recordings can be used for electronic and virtual field trips, science experiments and demonstrations etc.
- Personal Digital Assistants PDA, wireless devices are used as e-learning tools allowing the learners to access information anytime, anywhere online materials.
- Software libraries or digital libraries, contain programs that the for learner may download to their own computers. The software library includes e-books, interactive CDs and teaching tools.
- Evaluation as online testing, the teacher may prepare a question bank or an objective type test and place it on the network. The students answer and submit the test. The immediate feedback and scores can be obtained by the students. The

evaluation can be done by means of assessments in the form of presentation, documents and audio visuals, drill and practice, online quiz in various subjects etc.

ROLE OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)

The students are learning significantly from information and communication technology (ICT), which has a major and positive impact on student achievement. ICT, which essentially consists of television, computers, the internet, and other devices, can improve, expand, and deepen education when used properly. Educational institutions have long viewed it as ideal to use computers and the internet to improve education by making it more applicable to daily life. The electronic media era will be a reality for the inhabitants of future, who are currently our students. ICT can increase pupils' capacity for creativity and problem-solving.

However, ICT also provides new tools that can be used in teaching science and technology.

Databases, spreadsheets, statistical, and graphical programmes are used, as well as the whole spectrum of customary software. Additionally, modeling, visualization, and process simulation are significant. ICT is often used for "data logging," which is the practise of recording measurements over time for a range of factors.

Science and technology are probably going to play a big role in developing ICT as a tool for fostering teaching and learning. Additionally, it's possible that science and technology instructors have more resources.

Cyber bullying Trap: Giving students access to anonymous accounts and endless contact avenues can only lead to trouble. Cyber bullying has become a problem among young people today. This harassment has no end. There is no way to monitor or discipline students who are involved in it.

Inevitable Cheating: Easy access to information may seem like a great thing, it can become a real problem in a test taking environment. Cell phone have made cheating easier than ever.

A major Distraction: Attentiveness drops drastically in the classroom when students have their cell phones or other technologies out. The focus shifts from their teacher and education, to whatever they are looking at, playing, or doing on their phones. According to their training, although they will likely also need to have their abilities updated through appropriate training programmes, than many of their colleagues for this position

ADVANTAGES OF TECHNOLOGY IN EDUCATION

Continuous learning: - Students may continue learning no matter where they are, including at home, thanks to information technology in education. The efficiency of the education system has considerably increased as a result.

Sharing of knowledge: - Students may continue learning no matter where they are, including at home, thanks to information technology in education. The efficiency of the education system has considerably increased as a result.

Easily access to learning material: - Students can benefit from the e-books, study aids, and sample test questions that are available on the Internet to expand their knowledge.

Learning aids: - By using audio and visual materials, we can put some practical aspect to the theory taught in class, students can develop a better understanding of topics being taught.

Distance learning: - Now, it is possible to attend a college abroad at your convenience and without ever leaving your native country. Anyone can earn a second degree or other certificates with the use of online courses.

Proper record keeping: - The introduction of information technology in education has made it possible for safe and proper record keeping, in contrast to the past when records were kept manually and there were numerous incidents of lost files.

LIMITATIONS OF TECHNOLOGY IN EDUCATION

Access to inappropriate content: The biggest concern to the use of technology is that how easy pornographic, violent, and other inappropriate materials can be easily accessed and viewed.

A disconnected Youth: The harmful effect of technology is that when people are attached to their screens almost 24/7, which is causing an entirely new set of social issues to pop up.

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Conclusion: Technology, thus, is a great need in making education system perfect technology is a medium, it is not a substitute for teaching and as a subject-matter it is more demanding than traditional subjects. There is no doubt that our educational system has transformed as a result of the rapidly expanding technology since education now has a completely new meaning. We can now prepare kids for their lifetime learning, which calls for innovative educational strategies that progressively integrate technology into students' daily lives. It is common knowledge that a well-rounded education is the key to individual achievement. It places students on a road toward lifelong learning, preparing them for success in a world that is always changing. Through education, people can expand their knowledge, accept concepts, and create better lives for themselves and their communities. Thus the technology has entered into the various fields of education and almost in every aspect it is working wonders for the improvement of total teaching-learning process. Students today must master all of the tools available to them if they are to become tomorrow's leaders in science, technology, healthcare, the arts, and other fields. It's an exciting time to be a teacher, and we should take advantage of it by challenging ourselves, our students, our administrators, and legislators throughout the nation to support all teachers in utilising the technology tools at their disposal to their fullest potential.

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