



## Impact of Educational Technology in Our Education System

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### **Abstract**

*Technology is a gift of God, a gift of life; it is perhaps the greatest of God's gifts. It is the mother of civilization, arts, and science. Technology has certainly changed the way we live. It has emphasized different facets of life and redefined living. Undoubtedly, technology plays an important role in every sphere of life. Many complex and critical processes can be carried out with ease, and this greater efficiency has revolutionized the field of education. The use of technology has made the process of teaching and learning all the more enjoyable.*

**Keywords:** *Technology Innovation, Educational Technology, Impact of Educational Technology*

### **Introduction**

The term "technology" implies the application of scientific knowledge to various fields. In recent years, this concept has given rise to a new area of study in education known as educational technology. This interdisciplinary field combines the principles of education with technological advancements to enhance the learning process.

Nowadays, technology is very important in our education system. We have to be very sincere and careful when utilizing technology, as it can be harmful if not used in a proper way.

The 21st century is often regarded as the era of technology. Technology plays a very important role in our lives and is seen as the basis for the growth of an economy.

ICT (Information and Communication Technology) has evolved significantly to reach its present condition. The first phase lasted from 1450 BCE to 1450 CE, the second phase spanned the 15th to 18th centuries, the third phase covered the 19th and early 20th centuries, and the fourth phase, from 1992 to the present, focuses on the development of communication. This includes the integration of satellite technology and magnetic media into various fields within our education system.

According to I.K. Davies, "Educational Technology is concerned with the problems of education and training contexts, and it is characterized by the disciplined and systematic approach to the organization of resources for learning" (Davies, 1971).

"Educational technology may be defined as the application of the laws as well as recent discoveries of science and technology to the process of education" (S. S. Kulkarni, n.d.).

### **Objective of the Study**

To investigate how the integration of educational technology influences teaching-learning practices, encourages innovative pedagogical approaches, and contributes to the improvement of the education system.

### **Research Questions**

1. Is there any effect of technology on our education system?
2. Is there any progress in innovative ideas with the use of technology?
3. Is there proper use of technology?

## **Modern Technology in Education**

Online education originated from the University of Illinois in 1960. In 1971, Ivan Illich published a hugely influential book, *Deschooling Society*, in which he envisioned "learning webs"—a model for people to network the learning they needed.

According to the latest insights on how modern students prefer to use technology and how their learning is impacted by it, the transfer of knowledge has become very easy, convenient, and effective.

Visual images always have a stronger appeal compared to words; using projectors and visual aids in learning is another great example of technological use. The use of technology, such as projectors within schools and colleges, can significantly increase interaction and interest levels while also improving motivation.

Online degrees have now become a very common phenomenon. People wish to take up online courses for their learning and certification. Top institutions offer amazing online programs through the use of various interactive applications. Online degree programs around the world are especially popular among students who work and are looking for flexible studying options. During the COVID-19 pandemic, we all realized how important technology is to us. At that time, all institutions, including schools and colleges, needed to use technology to function. Teachers and students interacted with each other through platforms like Google Meet and Webex, conducting seminars and workshops with the proper arrangement of technology.

Educational technology is the combined use of computer hardware, software, educational theory, and practice to facilitate learning and teaching.

There are some modern and important terms that are part of our educational technology. Podcasts are used for audio programs, and vodcasts are commonly used for video programs. Blended learning refers to a mixture of online and offline learning. Synchronous learning occurs when we watch a class or program in live mode (e.g., watching a live video on YouTube). Asynchronous learning occurs when we watch a class or program in a recorded format. This means that if we are busy and cannot attend a live class, we can watch it when we are free; other examples of asynchronous communication include replying to emails and messages.

## **Impact of ICT in Education**

ICT promotes the manipulation of existing information and the creation of one's own knowledge to produce a tangible product for a given instructional purpose. The use of ICT for learning is student-centered and provides useful feedback through various interactive features. ICT allows students to discover and learn through new ways of teaching and learning, which are sustained by constructivist theories of learning rather than memorization and rote learning.

Traditional ICT may include the following points:

1. Printed media in the form of textbooks, resource books, journals, news items, and other literature available in school and public libraries.
2. Verbal information and ideas exchanged with peers, teachers, parents, and other members of society.

## **Modern ICT**

Modern ICT does not consist of single technologies like traditional technologies. Instead, it is a combination of hardware, software media, and delivery systems. In addition, these technologies have gone digital. Some of these include digital video, cameras, multimedia, personal computers (PCs), laptops, multimedia projectors to communicate with large groups, digital libraries, videotext, interactive videotext, interactive video disks, and interactive remote instruction.

ICT plays the same role in our communication process and its outcomes as other technologies do in making our lives more comfortable and purposeful. As a result, it has become quite popular in all walks of life.

One of the most significant forces influencing change in education in the present day is the emergence of highly advanced communication technologies. The distance education system, being an important innovation in

itself, is continuously influenced by technological reforms. Knowledge about recent technology and developments helps us become critically aware of new opportunities for increasing accessibility to education while maintaining educational quality.

Computers can be used in distance learning in two modes: local mode and transmitted mode. In local mode (or offline), the computer stands on its own as an independent system, helping the learner work independently. In transmitted mode, one computer is connected to another computer online, and the operation depends on communication between the devices. By interconnecting computers, a complex learning network can be created, which can link all distance learners with their teachers and with central or state institutions.

Keeping an eye on such a broad concept of educational technology, one is able to map out the topics or aspects covered through its study or application:

- Analysis of the teaching and learning process.
- Development of the curriculum.
- Development of teaching and learning materials.
- Effective utilization of hardware and mass media.
- Utilization of the subsystems of education.
- Providing essential feedback and control through evaluation.

The significant employment of technology in education allows for optimized collaboration, which helps in fruitfully creating room for collaborative learning and interaction in education.

The use of certain online platforms, like Google Docs and Office 365, facilitates mindful and effective interaction in the learning process.

Zoom and Google Meet are video conferencing apps that allow students to ask classroom-related questions through two-way communication and obtain further assistance with any school subject matter. Technology also improves engagement. Since students can easily get distracted in a traditional classroom, technology- with its digital experiences- can create an interactive learning atmosphere that keeps students engaged.

## **Web 2.0**

Web 2.0 refers to a more interactive and user-driven version of the World Wide Web. It allows users to create, share, and communicate their work without requiring web design skills. From an educational perspective, Web 2.0 supports a constructivist approach, enabling students to discover and construct knowledge.

## **Conclusion**

Technology is an integral part of living in the 21st century, often referred to as the fourth revolution, and is accompanied by both challenges and opportunities. Technology has a positive impact on education, but at the same time, it may also have negative effects. The impact of technology in education is not linear; while it presents various opportunities, it also poses several challenges. Therefore, technology is a very essential part of our daily lives, enabling us to do important work and providing many new ideas to share.

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