



ADVANCED TECHNOLOGY IN EDUCATION

Dr. Dipika Revjibhai Chaudhari

Assistant Professor,

Smt. S.I. Patel Ipcowala College of Education Petlad, Gujarat (India).

ABSTRACT:

Technology has impacted almost every aspect of life today, and education is no exception. In many ways, technology has profoundly changed education. In medieval times, books were rare and only few people had access to educational opportunities. Individuals had to travel to centers of learning to get an education. Today, massive amounts of information is available at one's fingertips through the Internet, and opportunities for formal learning are available online. Access to learning opportunities today is unprecedented in scope all because of advanced technology. Recent years have seen a great evolution in the technological world. With more and more people getting into digital media, it is essential for teachers to use the latest tools available in their work to engage students. To engage students in learning, one needs to be innovative and new ideas should be introduced so that students get excited about what they are learning.



KEYWORDS : Educational Technology, Student Engagement, and Online Learning.

➤ INTRODUCTION :

Technology is a powerful tool that can support and transform education in many ways, from making it easier for teachers to create instructional materials to enabling new ways for people to learn and work together. Technology is such a big part of the world of w which we live. Many of the jobs that did not require technology in past require in today's time. Technology is being used by children and adults on a daily basis by way of web surfing, texting, social networking, interactive games, and in more ways. We are an evolving technological society and in many ways have become dependent on its use. Thus, the use of technology and teaching students have to use it has become a high priority in the public schools.

Technology-based learning has not only transformed online learning but also enhanced and supplemented regular classroom-based pedagogy. As we know, classrooms look much different than what it used to look like a decade ago. In todays time we can see many companies are coming forward to provide technology based education with customized settings. To name a few are like NIIT, IL&FS, HCL Info systems, Tata Interactive Systems etc. Even parents want the best for their children and are not averse to paying a little extra. They see value in these initiatives by schools to modernize the way teaching is imparted today. Technology in education is preparing the students for the future or more precisely 'next generation'.

➤ TECHNOLOGY IN EDUCATION :

Technology in education also known as educational technology refers to the use of technology to support teaching and learning activities. This includes a range of hardware, software and online platforms such as computers, tablets, educational software's, learning management systems and multimedia resources. Additionally, educational technology can be based on theoretical knowledge from several disciplines such as educational sociology, artificial intelligence, computer science, and communications. Further, educational technology also helps students learn through various mediums.

In other words, educational technology refers to the process of integrating technology in education with the objective of diversifying the learning environment for students. Examples of the same include interactive screens in classrooms, online training sessions held during the pandemic, as well as usage and development of school-centric applications for assignment and submission of homework.

➤ EFFECT OF TECHNOLOGY IN EDUCATION :

Technology is impacting education simultaneously while evolving itself. With new techno lies coming into action, the education sector is witnessing a revolutionary change. Who imagined about e-learning, smart learning or Hands-on experience in the past 10 years? Thanks to digitalization and internet that many startups and Ed-Tech have become an alternate method of understanding and learning. The education system has completely transformed in today's time.

Technology has completely changed the way we teach and learn. Educational technology has proven as a way of enhancing the potential of the industry. By leveraging the power of technology, educational technology has enabled the automation of various tasks, allowing teachers to facilitate the classroom effectively. Through careful analysis of the role of technology in education sector, better outcomes can be expected from individual student performances, hence uplifting the performance of the classroom as a whole.

As technology has become more accessible, it has penetrated into every part of our lives and, as a result, we now expect every device that we use to be as technologically advanced as possible. Schools have also embraced technology as an integral part of their education process and, as a result, they now offer computer science classes, where students learn how to code computers and use them for their work or projects. The use of educational technology has therefore become important for today's learners because it offers them an opportunity to learn at a much faster pace than they would if they were not using such tools and programs.

➤ THE ADVANTAGES OF TECHNOLOGY :

- It provides a broader range of materials that are easily accessible.
Today's huge diversity of educational technology provides students number of options to select the finest ones for their learning requirements. This assists learners in developing the necessary skills and information to become competent professional in their chosen industry.
- It aids in the improvement of learners' communication skills as well as their performance at work as well outside work.
Learners who can communicate more effectively through electronic methods will perform better academically as well as in employment contexts because communication skills are most important when you want to express your views regarding any matter or to lead a meeting effectively.
- It provides learners with a fun and engaging learning experience.
Today's students must not only learn, but they also enjoy while gaining knowledge. Educational technology allows learners to have fun while learning, which helps them stay motivated and interested in learning a new skill. When students are asked to work on assignments or projects in small groups, technologically-advanced learners tend to help their inexperienced friends. Moreover, they are exposed to diverse ideas and such group efforts ultimately resulting in a swift exchange of information from one student to another.
- It enables learners to access the internet from any location at any time.

The internet has become such a crucial part of our lives that it is difficult to work efficiently without it. In today's environment, everyone is able to access the internet from anywhere at any time to do their projects and research without reaching out to books in library or wait for a particular time when they can do so.

Students benefit from educational technology in this sense since it allows them to access the internet even while they are in a classroom, at school, or at home.

- **Cost-effective.**
With the introduction of technology in education, resources like books and other forms of study material have become more accessible. This further leads to a reduction in tuition fees, lack of dependency on books as well as their prices.
Additionally, the existence of e-books has made things easier for low-income families wherein the students can access the same quality of education without any compromise.
Students benefit from educational technology in this sense since it allows them to access the internet even while they are in a classroom, at school, or at home.
- **It assist in learning new skills and gaining new knowledge.**
Learning new skills and knowledge are two very important areas of life that students should imbibe within. Students can gain these abilities and expand their knowledge through numerous online programs by utilizing educational technologies. These programs provide students with the opportunity to learn about a variety of topics that are both intriguing and relevant to their fields of work or study.
- **It enables learners to improve both mentally and physically.**
The advantages of instructional technology can include improving students mental and physical wellness. Students can improve their academic performance and physical health by using these tools, which assist them to improve their learning and cognitive skills.
- **It assists students in staying connected with technological advancements.**
Learners who can keep up with the newest technology advances will be able to expand their knowledge of various fields and develop new talents that they can utilize in the future. These beneficiaries will also be more likely to secure employment because they will have a thorough understanding of the latest trends in various fields and be able to help companies become more efficient by knowing how new technologies can be used for various purposes.

➤ **CONCLUSION :**

As we have seen, technology can be used in many different ways to support education. Teachers need to be well-versed in the latest technological tools so that they can properly engage their beneficiaries. Use of Advanced Technology at the first level of institutions is one way to rise above the challenges of today's education industry. With the worldwide reach of the Internet and the use of smart devices that can connect to it, a new age of anytime anywhere education is dawning. It will be up to instructional designers and educational technologies to make the most of the opportunities provided by technology to change education so that effective and efficient education is available to students everywhere.

➤ **REFERENCES:**

1. Ankuya, H. (2021). ઈનફરમેશન ટેકનોલોજી અને તેની અસરો. *Towards Excellence*, 13(1).
2. Gordon, A., Hacker, M., & de Vries, M. (Eds.). (1993). *Advanced educational technology in technology education* (Vol. 109). Springer Science & Business Media.
3. Patel, D. (2022). ઓનલાઇન અને ડિજિટલ શિક્ષણમાં ટેકનોલોજીનો ઉપયોગ. *Vidhyayana-An International Multidisciplinary Peer-Reviewed E-Journal-ISSN 2454-8596*, 8(1).
4. Raja, R., & Nagasubramani, P. C. (2018). Impact of modern technology in education. *Journal of applied and advanced research*, 3(1), 33-35.

5. Singh, I. (2021). Role of modern technology in education: An overview of Indian national education policy 2020. *Multidisciplinary Issues in Social Science Research*, 101-120.
6. Singh, M. (2020). Impact of technology in Indian education system. *Advance and Innovative Research*, 349.
7. <https://online.purdue.edu/blog/education/how-has-technology-changed-education>
8. https://m.timesofindia.com/education/online-schooling/understanding-the-growing-importance-of-technology-in-education/amp_articleshow/94152631.cms