



Impact of ICT on education

Dr. Poonam Singh, Principal

Choudhary Partap Singh Memorial college of education Gurugram

Abstract

Every aspect of life has been transformed by technological advancements, including interpersonal communication, the economics, the entertainment sector, and even educational institutions. Today, more than ever before, students are confronted with changes that not only affect how they study, but also how they live their daily lives. Technology has a profound effect on the education of the next generation of pupils.

Key Words: Education, Modern, Technology, Teaching etc.

Introduction

The twenty-first century is often described as the technological age. Our daily lives would be unimaginable without the advancements made possible by modern technology. It is seen as a foundation for economic development. An economy that lacks technological advancement is doomed to stagnation in the modern world. This is due to the fact that technology has made our jobs simpler and more efficient. Education is one of the many fields where the effect of technology may be seen.

Every day, technology is transforming the way people work, play, and interconnect. So it's only logical that new developments in "digital technology" are also transforming the educational landscape.

Teachers now have a wealth of resources at their fingertips because to technological advancements: "Assistive technology, virtual and augmented reality, high-tech collaboration tools, gamification, podcasting, blogging, 3D printing, artificial intelligence, customised learning, and much more are all" generating a great deal of interest nowadays."

Some of the greatest encouraging "educational technology" examples and trends will be discussed in this section. For starters, let's define what we mean by "educational technology," as the term may be used to describe any of the following:

- Educational approaches to learning theory and practise, as well as
- Information-gathering and knowledge-transmission technologies

Modern technology in education

When it comes to student learning and engagement, new research shows that students prefer to utilise technology and that using technology has a positive influence on student learning. Using technology makes it more exciting and participatory for them, too. As a result, the dissemination of information is made simple, convenient, and effective. Using technology in whatever area of life, including schooling, speeds up our brains, thus this is a positive development. "Even in schools, universities, and colleges," students have come to rely on and depend on new technologies that make life simpler and more enjoyable. The following are some ways in which students today may make use of technology:

- **Internet connection and round the clock connectivity**



Over the last decade, the internet's significance has multiplied many times over. No longer can its significance in the educational community be understated. Internet access is a boon to students, despite the risks of fraud and other downsides. The internet has become ubiquitous in our daily lives, permeating practically every aspect of our lives. Our phones, game consoles, and television sets are all connected to the internet in some way. Many resources, such as tutorials and other supplementary materials, may be accessed by students with ease over the internet, allowing them to improve their academic performance and progress.

- **Using projectors and visuals**

When it comes to appealing to the senses, visuals are always more powerful than words. Another fantastic application of technology is to employ projectors and visual aids to help students study. The most prestigious educational institutions in the world today depend on dynamic PowerPoint presentations and projections to keep students engaged and interested in the material being taught. The usage of projectors in schools and colleges may increase the amount of engagement and interest, as well as the level of motivation among students. When it comes to teaching students, they prefer pictures that pique their interest rather than simply words. When it comes to technology, the learning process is also streamlined.

- **Digital footprint in the education sector**

In terms of “digital and education, the use of digital media in the education sector” is currently more widespread than it was before. There has been an increase in the number of students and forums that are open around the clock to assist with coursework and other tasks. There are and will be more apps to help pupils grow and learn as the potential of digital expands.

- **Online degrees with the use of technology**

Online degrees are increasingly a typical occurrence. For educational and certification purposes, many people are interested in taking online courses. Some of the best universities in the world provide a wide variety of online programmes that may be accessed via different apps and the internet. As support and awareness grows for this idea, it will continue to climb. Online degree programmes are increasingly popular among students who work and are looking for programmes that provide for flexibility in their schedules.

Importance of technology in education

Education technology has a fourfold purpose: curriculum integration, instructional delivery, instruction support, and enhancement of the overall learning process. Technology plays an important role in education, and this is no exception. Education is now active and combative rather than passive and reactive because of technology improvements. Both in the workplace and in the classroom, education is a must. Workers in the former are given the opportunity to learn new skills and adapt their work habits. In the second case, the goal is to pique pupils' interest in learning new things. The use of technology may help pupils better comprehend and remember information in both cases.

Factors affecting technology in education

In his writings, Jung discusses the significant challenges that “our society's” instructors face as a result of the fast growth of information. Educators must become tech-savvy in order to keep up with the rapidly changing landscape of education. Since these new technologies need more



training for instructors, so too do these new technologies. “Teachers' attitudes toward computers” have a critical role in the effectiveness of “ICT in education” implementation. – They emphasised the fact that instructors' views toward computers aren't always favourable, and that this might contribute to computer-based initiatives failing. Among the most often stated obstacles are the following:

- “lack of time;
- lack of access;
- lack of resources;
- lack of expertise and
- lack of support”.

Another quality to consider is one's ability to be trusted. Incompatibility between house and school software and slow or sluggish “internet connectivity” were among the dependability difficulties. Students/teachers had more up-to-date software at home.

Impact of ICT on education

ICT has the potential to make education more accessible while also enhancing its usefulness and quality. For instructors and students alike, Tinio (2002) claimed that the promotion of:

- **Active learning:** Analysis of test info, in addition to student performance reports, are all made easier via the use of ICT technologies. Learners who use ICT are more engaged than those who use traditional methods of teaching that rely on memory or rote repetition.
- **Collaborative and Cooperative learning:** Students and instructors can collaborate and communicate with each other regardless of the distance between them thanks to the use of ICT. The opportunity to work in teams with individuals from diverse cultures and backgrounds helps students improve their communication and global understanding. Researchers have discovered that students and instructors tend to have more of an engaged interaction when using ICT in the classroom and outside of it. When people work together, they take responsibility for their own activities while also learning to appreciate and respect the skills and contributions of their colleagues.
- **Creative Learning:** “The use of information and communication technology (ICT)” may be used to develop new knowledge from existing information, regardless of whether it's for a tangible product or a particular educational objective.
- **Integrative learning:** By removing the synthetic boundary between theory and practise, ICT encourages an integrated approach to teaching and learning, unlike in the conventional classroom where emphasis is on a single element.
- **Evaluative learning:** Student-centered and interactive, the use of ICT for learning delivers important “feedback via a wide range of interactive features Instead of memorising and rote learning, ICT allows students to investigate and learn via innovative approaches of teaching and learning that are supported by constructivist theories of learning.”

Positive impact

1. Enhanced Teaching and Learning:



- Teachers may use “digital cameras, projectors, mind training software, computers, Power Point presentations”, and 3D visualisation tools to help pupils understand concepts more quickly.
- It's important to remember that pupils have a more positive attitude toward learning when topics are visually explained. In the classroom, they're able to engage more vigorously, and even lecturers have the chance to make their lessons extra dynamic and attractive.

2. Globalization:

- Video conferencing allows kids who attend school in various regions of the state to virtually "meet" in the classroom.
- In order to assist pupils learn a foreign language, certain services, such as www.glovico.com, connect them up with a tutor in another nation.

3. No Geographical Limitations:

- Online degree programmes have made it unnecessary to be really present in the class. Even some international colleges have begun offering online degree programmes for students to enrol in.
- In today's educational system, distance learning and online education are becoming more significant.

Conclusion

The term "educational technology" refers to any technology that facilitates active learning in a classroom. With the use of educational technology, teachers may design interactive digital textbooks and engage students via gamification, track attendance, give homework, and administer exams and quizzes that provide instant feedback on the effectiveness of their teachings. Learning in an environment that includes cellphones, computers, and tablets is upsetting conventional schooling and teaching techniques because of educational technology. Both beneficial and bad impacts of technology may be seen in schooling. Teachers and students should make the most of this opportunity by looking at it positively and minimising the constraints that hinder many kids and schools from reaching their full potential. “A more technologically sophisticated education sector” must be implemented in the near future by every country.

References

1. Beringer, V. (2009, October 20) For kids, pen’s mightier than keyboard. futurity.org. Retrieved February 25th 2013
2. Bounds, G. (2010, October 5) How handwriting trains the brain – forming letters is key to learning, memory, idea. wsj.com. Retrieved February 25th 2013
3. Bransford, J., Brown, A., & Cocking, R. (2000). How people learn: Brain, mind, experience, and school. Washington, DC: National Academic Press.
4. Brill, J. M., & Galloway, C. (2007). Perils and promises: University instructors’ integration of technology in classroom-based practices. *British Journal of Educational Technology*. 38(1), 95-105.



5. Leising, J. (2013 January 30) The new script for teaching handwriting is no script at all. wsj.com Retrieved February 25th 2013
6. Roschelle, J., Pea, R., Hoadley, C., Gordin, D., & Means, B. (2000). Future of children, 10(2), 76-101.
7. Shah (2011, July 16) Why does writing make us smart ? huffingpost.com. Retrieved February 25th 2013
8. Wenglinski, H. (1998). Does it compute? The relationship between educational technology and student achievement in mathematics. Princeton, NJ: ETS.