

The Impact of Modern Technology on Education

Merlin P George

SNM Training College, Moothakunnam

Abstract

Technology plays a prime role in our life and is the basis of the growth of an economy. With the help of modern technology, many complex and critical processes can be carried out with ease and greater efficiency. The impact of technology can be felt in every possible field, like banking, trade, knowledge sharing, data analysis, biotechnology, and education. In the field of education, it has become easier for teachers to impart knowledge and for students to acquire it. ICT has a tremendous impact on education in terms of the acquisition and absorption of knowledge among both teachers and students. Technology provides a better interactive experience, access to data from a variety of sources, helps in digital literacy, provides better insight into student performance, and real-time learning at their own pace. *Keywords:* modern technology, ICT, digital literacy

Introduction

Technology, today, plays a prime role in our life. It is seen as the basis of the growth of an economy. An economy that is lacking in technology can never grow in today's global scenario. This is because technology makes our tasks easier, faster, and less time-consuming. Today's youth have unprecedented access to modern technology and use them in expected and unexpected ways to attain outcomes that have certainly changed the way we live. They spend many hours a day using technology, and the vast majority of them have access to the Internet, cell phones, smart phones, video games, and many more. Technology has certainly changed the way we live. It has impacted various aspects of life and has redefined our lives. With the help of modern technology, many complex and critical processes can be carried out with ease and greater efficiency. The impact of technology can be felt in every possible field, like banking, trade, knowledge sharing, data analysis, and biotechnology and one such field is education. In the field of education, it has become easier for teachers to impart knowledge and for students to acquire it.

Modern Technology in Education

Technology has greatly impacted almost entire aspect of our lives, and education is no exception. Technology gives students instantaneous entry to quality information which leads to learning at a quicker pace than before. The internet provides a variety of knowledge and doesn't limit students to a single person's opinion. They also find it much more interactive, as well as interesting. The transfer of knowledge becomes very easy and suitable, as well as effective. What this means is, that our minds now tend to work faster when supported by the use of modern technology, be it any part of life. Here we talk about education. The dependence on technology simply gives life an easy smooth journey. These days, this reliance is completely inevitable in schools, universities, and colleges. Now a day's students today can make use of technology in the following ways:

Using Projectors and Visuals

Educational technology in education helps today's teachers to integrate new technologies and tools into the classroom. Teachers are able to improve learner-centeredness and engage their students in unique, innovative, and equitable ways using visual images that appeal compared to words. Using projectors and visuals to aid in learning is another form of great technology in use. Top institutions around the world now rely on the use of amazing PowerPoint presentations and projections to keep learning interactive and interesting. The use of technology such as projectors in schools and colleges takes the interaction and interest levels up and also improves motivation. Students like to see appealing visuals that entice them to think rather than read lifeless words. The learning part becomes pretty efficient when we use technology.

Online Degrees with the Use of Technology

Online degrees have now become a common phenomenon. The online degree system is famous among students who work and look for flexible studying programs. Learners take up online certifications for their learning. Top institutions offer amazing online programs with the use of various applications of technology and the internet. This trend will continue to rise as it gets more support and awareness among people.

Digital Footprint in the Education Sector

Digital media in the education sector has now grown seamlessly. This penetration has facilitated round-the-clock connectivity with students and diverse forums that are available for different tasks and assignments. As the power of the digital world increases, there exist innovative applications that will assist students in their development and learning.

Importance of Technology in Education

Technology has produced drastic changes in all areas of life, from communication networks, the economy, entertainment industry, to education. Students face challenges while using technological innovations in instruction and assessment that alters the way they learn. Technology can do so much more to improve schools. It can improve teachers' and students' well-being, empower parents' involvement through effective communication, and the tremendous impact that modern technologies have on new generations of students. Children grow up with laptops, tablets, gadgets, and modern digital systems being ready for the modernization of education. Learning styles have changed over the years, gradually introducing new technologies with the potential to improve teaching. Students' readiness for technology in classrooms is a positive sign because the digital age brings new challenges, not only in education but also in all other areas of life as well.

Factors Affecting Technology in Education

Modern technologies demand that teachers learn how to use these technologies in their teaching. Hence these new technologies increase the teachers' ability to be trained in modern technologies of instruction and assessment. The attitude of teachers towards computers is a key factor in the successful implementation of ICT in education. Teachers should be techno pedagogues and should possess a positive attitude towards computers and this may lead to the failure of computer-based projects. Another factor that affects technology in education is reliability. Reliability includes hardware failures, incompatible software between home and

school, and slow internet connectivity. There may be out-of-date software available at school while the students/educators have more up-to-date software at home!

Impact of ICT on Education

In the educational context, ICT has the potential to increase access to education and improve its quality. ICT has a tremendous impact on education in terms of the acquisition and absorption of knowledge among both teachers and students. A good impact is achievable through the promotion of:

- ✓ **Active Learning:** In contrast to memorization-based or rote learning, ICT promotes learner engagement as learners choose what to learn at their own pace and work on real-life situations and related problems.
- ✓ **Creative Learning:** ICT promotes the manipulation of existing information and to the creation of one's own knowledge to produce a tangible product or a given instructional purpose.
- ✓ **Collaborative and Cooperative Learning:** ICT encourages interaction and cooperation among students and teachers regardless of the distance between them providing students the chance to work with people from diverse cultures. Working together in groups enhances communicative skills and global awareness. The use of ICT leads to more cooperation among learners within and beyond schools having an interactive relationship between students and teachers. Collaboration is a philosophy of interaction and personal lifestyle promoting responsibility among individuals for their actions, including learning and respecting the abilities and contributions of their peers.
- ✓ **Integrative Learning:** ICT promotes an integrative approach to teaching and learning, by eliminating the separation between theory and practice unlike in traditional classrooms. ICT tools help with the calculation and analysis of information obtained from examinations. The student's performance reports are computerized and made easily available.
- ✓ **Evaluative learning:** 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 learning which are sustained by constructivist theories of learning rather than students' memorization and rote learning.

Positive Impacts

- ✚ Enhanced Teaching and Learning: Technological developments like digital cameras, projectors, mind training software, PowerPoint presentations, and 3D visualization tools have become great sources for teachers to help students grasp a concept easily.
- ✚ Globalization: The students from schools in different parts of the world can “meet” their counterparts through video conferencing without leaving the classrooms
- ✚ No Geographical Limitations: With the introduction of online degree programs, there is hardly any need of being present physically in the classroom. Distance learning and online education have become important parts of the education system.

Negative Impacts

- ✚ Declining Writing Skills: Due to the excessive usage of online chatting and shortcuts, the writing skills of today’s young generation have declined tremendously. These days, children are relying more on digital communication that they have totally forgotten about improving their writing skills. They don’t know the spelling of important words, how to use grammar properly, and how to do cursive writing.
- ✚ Increasing Incidents of Cheating: Technological developments like graphical calculators, high-tech watches, mini cameras, and similar equipment have become great sources to cheat in examinations. It is easier for students to write formulae and notes on graphing calculators, with the least chance of being caught.
- ✚ Lack of Focus: SMS or text messaging has become a favourite pastime of many students. Students are seen playing with their cell phones day and night or driving and very often even between lectures. Being ever-connected to the online world has resulted in a lack of focus and concentration in academics and even in sports and extracurricular activities.

Conclusion

Technology in education provides a better interactive experience during the learning and teaching process, provides access to an unlimited amount of current information and data from a variety of sources, helps in digital literacy, provides better insight into student performance, and students can choose between real-time learning or learning at their own pace. Technology has a positive impact on education and at the same time poses negative effects. Teachers and students should take advantage side of technology. They should eliminate the drawbacks. A balanced and wise approach clears the obstacles in learning which are pulling back students as well as schools from achieving excellence.

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