

IMPACT OF EDUCATIONAL TECHNOLOGY IN TODAY'S SCENARIO

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ABSTRACT

Technology plays a vital role in every sphere of life, and education is no exception. The advent of technology has deeply impacted the educational scene. It has made learning easy and interesting. The role of technology in education has been an important question since the potential of computer technology to transform Skinner's teaching modules recognised in the 1960s. It remains an important issue today with debates about the impact of technology on our society, the implications of quick and easy online access to information for knowledge and learning and the effect of technology on young people's social, emotional and physical development frequently in the news. It is therefore important to take look of what we know about the impact of digital technology on education from what we have learned over the last fifty years. The Educational technology can be defined as systematic application of scientific or other organized knowledge to practical task. Therefore, **educational technology** is based on theoretical knowledge from different disciplines (communication, psychology, sociology, philosophy, artificial intelligence, computer science, etc.) plus experiential knowledge from educational practise. It is the use of technology to improve education or a systematic process for designing instruction or training used to improve performance. Educational technology is sometimes also known as instructional technology or learning technology.

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Impact of educational technology

Modern-day students not only have computers to help them with their schoolwork, they also use the Internet for research while teachers use technology to enhance their lessons. Technology has revolutionized the field of education. The importance of technology in schools cannot be ignored. In fact, with the onset of computers in education, it has become easier for teachers to impart knowledge and for students to acquire it. The use of technology has made the process of teaching and learning all the more enjoyable.

- Research

Modern-day students not only have computers to help them with their schoolwork, they also use the Internet for research while teachers use technology to enhance their lessons. If a school's library is outdated or lacking in a selection of titles, a student might find it difficult to compile the necessary research for an essay or research paper. As long as the school has a computer lab, students are able to use the Internet and digital encyclopedias to obtain the research they need. Many schools use software like the Encyclopedia Britannica to help students do research.

- Globalization

When schools in different parts of the state, country or world connect, students can "meet" their counterparts through video conferencing without leaving the classroom. Some sites, such as Glovico, are used to help students learn foreign languages online by pairing a group of students with a teacher from another country.

- Educational Games

In younger grades, teachers expose children to computers through educational games. Instead of playing board games that focus on education, students can learn the basics of spelling, counting and other early educational lessons through computer games that make learning fun. Because many schools have at least one computer in each classroom, the teacher can make that computer a vital part of learning for young students.

- Distance Education

In the past, students could take distance or continuing education classes, also called "correspondence courses," at community colleges and universities. After enrolling in a course of this style, a student would receive course documents in the mail and would be required to mail assignments to his teacher at the educational institution. The process could be long and complicated. Thanks to technology, continuing education students can take courses over the Internet at their convenience.

- Web Seminars

Not every school has the resources and budget to send its students on field trips related to the course of study. When this is the case, the students' education can suffer. But thanks to technology, students can use the Internet to virtually attend Web seminars put on by museums and other educational institutions. NASA, for instance, offers a program that allows students to talk to astronauts in space.

- Teaching aid

Computers offer an interactive audio-visual medium. PowerPoint presentations and animation software can be used to present information in an interactive way. Owing to the audio-visual effects, this way of teaching invites greater interest from students. The method is equally helpful for teachers. Projectors and screens facilitate simultaneous viewing of information by a large number of students. Addressing systems using microphones and speakers make it possible for teachers to reach a larger number of students simultaneously. These teaching aids have led to improvements in student attendance and their attentiveness in class. Interactive media have proven to be useful in increasing students' concentration levels.

- Storage information

Computers enable better and more robust storage of information. If you weigh chalk, board, books, and notebooks against technology, you find that technology can substitute for any and all of these. Computers have replaced chalk and board; they can even do the talking sometimes while the teacher takes a step back and lets the presentations 'speak'. Digital libraries require no physical space and students and teachers sitting in different parts of the world can access the same library at the same time. Compact memory devices have replaced notebooks and a keyboard and computer mouse are the new writing devices. What would have required hundred pages of a book can be compacted into a tiny memory chip. It can take hours to write, but it takes only seconds to type.

- Internet

The Internet is a huge information base. It can be used as an effective tool for acquiring knowledge. All a web user needs to do is to key in queries to search engines. Users are presented with thousands of search results. There are several websites and web directories that offer information on literally everything in the world. Technology has eliminated space and time constraints. Online education and distance learning have given a new dimension to education and higher learning. Even if students are geographically far away from each other, they can be a part of one classroom. Many educational institutes offer online courses, which eliminates time and space constraints in acquiring education. Universities offer online educational programs wherein students can interact with their teachers over the Internet, access reference material from the University website, and earn degrees online.

- Teaching

Thanks to the application of technology, education has become more collaborative. With plethora of information so easily available to students, they can be a part of the process; they don't need to remain at the receiving end. Owing to the use of technology, subject experts can come together to formulate courses, design assessments, and better the process of teaching. The day isn't far, when students located in different parts of the world will be able to seek advice from experts spread across the globe. Education will be customized then. It will cater to different learning needs and varying grasping abilities and interests of students.

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- Computer education

Today, computer education is a part of school and college curricula. Considering the wide range of applications of computer technology, it is necessary for each one of us to be computer-friendly. Considering the advantages of the Internet technology, it is important for each of us to gain basic knowledge of Internet access and web research. We live in a technology-age and hence, it is important for us to be abreast with the latest inventions in the field. With education, we acquire knowledge of the functioning and use of different pieces of technology. And with the application of technology, we can educate ourselves better. This is the impact that technology and education have on each other. Education boosts the use of technology and technology aids education. The importance of technology in education cannot be stressed enough. The introduction of technology in the educational field has made the process of learning and knowledge-sharing, a more interactive and pleasurable experience. Perhaps, the greatest impact of technology on education is the change in perspective. The paradigm shift in thinking from local to global can be attributed to technology. Indeed technology is one of God's greatest gifts to mankind.

- Change in Student and Teacher Roles

When students are using technology as a tool or a support for communicating with others, they are in an active role rather than the passive role of recipient of information transmitted by a teacher, textbook, or broadcast. The student is actively making choices about how to generate, obtain, manipulate, or display information. Technology use allows many more students to be actively thinking about information, making choices, and executing skills than is typical in teacher-led lessons. Moreover, when technology is

used as a tool to support students in performing authentic tasks, the students are in the position of defining their goals, making design decisions, and evaluating their progress.

The teacher's role changes as well. The teacher is no longer the center of attention as the dispenser of information, but rather plays the role of facilitator, setting project goals and providing guidelines and resources, moving from student to student or group to group, providing suggestions and support for student activity. As students work on their technology-supported products, the teacher rotates through the room, looking over shoulders, asking about the reasons for various design choices, and suggesting resources that might be used.

- Increased Motivation and Self Esteem

The most common--and in fact, nearly universal--teacher-reported effect on students was an increase in motivation. Teachers and students are sometimes surprised at the level of technology-based accomplishment displayed by students who have shown much less initiative or facility with more conventional academic tasks. Teachers talked about motivation from a number of different perspectives. Some mentioned motivation with respect to working in a specific subject area, for example, a greater willingness to write or to work on computational skills. Others spoke in terms of more general motivational effects--student satisfaction with the immediate feedback provided by the computer and the sense of accomplishment and power gained in working with technology

- Technical Skills

Students, even at the elementary school level, are able to acquire an impressive level of skill with a broad range of computer software. Although the specific software tools in use will likely change before these students enter the world of work, the students acquire a basic understanding of how various classes of computer tools behave and a confidence about being able to learn to use new tools that will support their learning of new software applications.

- Accomplishment of More Complex Tasks

Teachers for the observed classes and activities at the case study sites were nearly unanimous also in reporting that students were able to handle *more complex assignments* and do more with higher-order skills because of the supports and capabilities provided by technology.

- More Collaboration with Peers

Another effect of technology cited by a great majority of teachers is an increased inclination on the part of students to *work cooperatively* and to provide *peer tutoring*. While many of the classrooms we observed assigned technology-based projects to small groups of students, as discussed above, there was also considerable tutoring going on around the use of technology itself. Collaboration is fostered for obvious reasons when students are assigned to work in pairs or small groups for work at a limited number of computers. But even when each student has a computer, teachers note an increased frequency of students helping each other. Students who have mastered specific computer skills generally derive pride and enjoyment from helping others.

Thus educational technology has given a lot to this world and continues to add more knowledge to us. It has brought nation to heights with new discoveries and inventions and will continue to imbibe with bulk of new knowledge and learning.

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