

The Impact of Modern Technology on Education

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Abstract: *Technology is a divine gift. This may well be the greatest of God's gifts, after the gift of life. It is the cradle of civilizations, as well as the arts and sciences. The way we live has unquestionably altered as a result of technological advancements. It has had an impact on several aspects of life and has redefined living. Technology, without a question, plays a significant part in every aspect of life. Thanks to technological advancements, a number of manual chores can now be automated. Furthermore, with the aid of contemporary technology, many difficult and crucial procedures may be carried out with increased ease and efficiency. Living has changed, and for the better, as a result of the application of technology. Education has been transformed by technological advancements. Technology's role in schools cannot be overstated. Indeed, the introduction of computers into the classroom has made it easier for teachers to convey knowledge and pupils to absorb it. Teaching and learning have become more pleasurable as a result of the usage of technology.*

Keywords: Modern Technology, Education, Teaching

I. INTRODUCTION

The twenty-first century is frequently regarded as a period of engineering. Nowadays, engineering plays an important role in our lives. It is viewed as a system's foundation for growth. In the current world, an economy that lacks application can never grow. This is because engineering allows us to work more calmly and for a shorter period of time. One such arena where the impact of applied science can always be felt is Content. To be able to educate others, a teacher must be well educated and competent. They must also obtain the services of a retentive scholar's care and bring gratification in a real strategy. Thus, education is a key employment, and people liked them as they guided and assisted beginners in identifying valuable republican countries. Teaching was one of the social work tasks because of the society's admiration. Also, most activities that people used to rummage-sale have remained community-focused, and education has remained available in neighborhoods where minorities live. People have been drawn out of townships to these metropolises for a variety of services as a result of the rise of industrial and prosperous metropolises. After the populace increased the demand for knowledge, the old conservatories or parvenus were unable to provide the demand. As a result, original seminaries had to be modified, existing seminaries had to be expanded, and new professors were needed to provide education. To bring the allegation to light, new, undertrained, and incompetent recruits were handed down, and thus the vocation was rehabilitated from a public amenity to a profit making commercial. Commerciality is governed by a fee, and when it falls short, accomplished individuals are more likely to explore additional service contributions and produce compensation. Previous governments rummage sale this subdivision as a service formation unit, causing the sector to deteriorate. The conversion of analogous signs to numerical arose a new talent that was attained of eliminating broadcast errors and performing the same work roughly competently. With the widespread employment of technology on behalf of processors and other electrical equipment, numerical skills have been targeted for over 50 years. Since the early 1960s, educators and computer scientists have advocated for the use of processors in education. Initially, it was rummage-sale as comprehending and keying text to supply commands on how to utilise the processor due to its little-equal communication with operators and developed towards resolving about time-consuming problems. However, with the development of suitable micros and the inclusion of transcripts, visuals, and dye, there remained a steady feasting of processors in commercial, educational.

Processors first appeared in Sri Lanka in the 1960s, and at the same time, calculating was added to the prospectus of the Institute of Colombo. Learning about processors progressed from empathizing with how they process things, to software design it to execute certain jobs, to using it to perform everyday activities. Processors also shifted from text and information operation to communication delivery by text, images, audio, and other devices. Another step forward has been the ability to network several computers in order to exchange knowledge and resources. With all of these

advancements, the pricing of a computer has steadily and dramatically decreased. Along with these courseware and improved documents, visual, and dye additions, it appeared to create more effective learning materials.

1.1 Modern Technology in Education

According to the most recent findings on how current students choose to use technology and how technology affects their learning, using advanced tools, technologies, and tools boosts students' learning and interactivity. When technology is used to help them, they find it to be more interactive and fuller of intriguing places. Information exchange becomes very simple and convenient, as well as very effective. What this means is that, when supported by advanced technology, our brains now tend to operate quicker in any aspect of life, including education. Even in schools, universities, and colleges, the reliance and dependence on such an invention that just makes life a simple, smooth journey is unavoidable

1.2 Internet Access and Connectivity

Over the last decade, the internet has expanded in importance by a factor of ten. Its importance in the sphere of education cannot be stressed any longer. Despite the risks of scam and disadvantages, kids find that using the internet is a boon. The internet is now integrated into practically every aspect of our lives. The internet is virtually everywhere, from television to gaming consoles to our phones. Students may discover a lot of aid, tutorials, and other forms of assisting content on the web, which they can utilise to academically develop and boost their learning.

A. Using Visual and Projectors.

When compared to words, visual images usually have a great attraction. Another excellent technical application is the use of projectors and graphics to enhance learning. To make learning interactive and entertaining, top universities throughout the world today rely on great PowerPoint presentations and projections. The usage of technology in schools and colleges, such as projectors, can increase interaction and interest while also improving motivation. Instead of just reading words, students prefer to see enticing pictures and something that encourages them to think. When it comes to technology, the learning process also becomes quite efficient.

B. The Educational Sector's Digital Footprint

When it comes to digital and education, the use of digital media in the educational sector has increased. This penetration has resulted in students being able to communicate with each other at all hours of the day and night, as well as a variety of forums where they may get help with various assignments. As the potential of digital expands, more applications will emerge to assist students in their learning and development.

C. Online Degrees with the Use of Technology

Online degrees have become quite popular in recent years. People are interested in taking online courses to further their education and obtain credentials. With the use of numerous technologies and the internet, top universities offer great online programmes. This is a topic that will gain traction as more people become aware of it. Students who work and want flexible education programmes are more familiar with the online course scenario around the world.

1.3 Technology's Importance in Education

Technology plays four roles in education: it is used as part of the curriculum, as an instructional delivery method, as a means of assisting with instructions, and as a tool to improve the overall learning process. Education has progressed from being passive and reactive to being participatory and combative as a result of technological advancements.

In both business and academia, education is critical. In the former, workers are taught or trained to do tasks differently than they did previously. In the latter case, education is aimed at instilling in kids a sense of wonder. In either scenario,

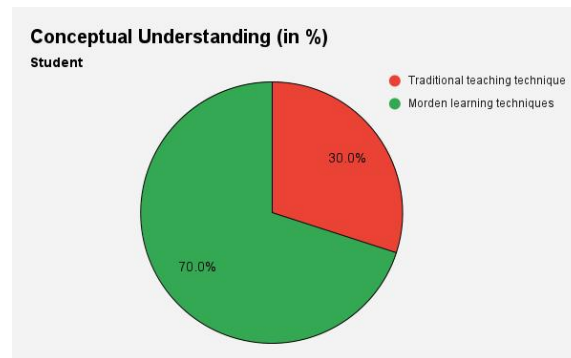


Fig. 1. Conceptual Understanding by Student with the help of Modern Technology

II. FACTORS INFLUENCING EDUCATIONAL TECHNOLOGY

Jung discusses the great problem that contemporary society's instructors face as a result of the rapid proliferation of knowledge. Teachers must learn how to employ current technologies in their teaching in order to keep up with the times. As a result, these new technologies increase the training requirements for teachers. Teachers' attitudes toward computers, according to Grassed and Lloyd (1985), are a critical aspect in the successful use of ICT in education. They stated that teachers do not always have a positive attitude toward computers, and that their negative views may cause computer-based projects to fail.

The following are some of the most frequently mentioned barriers:

- Time constraints;
- Lack of access;
- A scarcity of resources;
- A scarcity of experience;
- A lack of assistance.

Butler and Seldom (2002) and Chimer & Williams (2001) both mention reliability as a barrier. Hardware problems, incompatible software between school and home, poor or slow internet service, and out-of-date software, which is largely available at school while students/educators have more up-to-date software at home, were all examples of reliability.

2.1 ICT's Impact on Education

In the context of education, ICT offers the potential to expand access to education while also improving its relevance and quality. Tine (2002) said that ICT has a huge impact on education in terms of knowledge acquisition and absorption for both faculty and students by promoting:

A. Active Learning:

ICT tools aid in the calculation and analysis of the information gathered for examinations, as well as the computerization and accessibility of students' performance reports. In contrast to memorization-based, ICT encourages learner engagement by allowing students to pick what they want to learn at their own pace and apply what they've learned to real-world challenges.

B. Learning through Creativity:

ICT encourages the manipulation of existing data and the creation of one's own knowledge in order to generate a concrete product or meet a specific educational goal.

C. Integrative Learning:

ICT encourages an integrative approach to teaching and learning by removing the synthetic divide between theory and practice, which is common in traditional classrooms where the focus is on a single aspect.

D. Evaluative Learning:

Using ICT for learning is student-centred and gives meaningful feedback via a variety of interactive elements. Instead of memorizing and rote learning, ICT allows students to investigate and learn through new approaches of teaching and learning that are supported by constructivist theories of learning.

2.2 Affirmative Impact

A. Improved Teaching and Learning:

- Scientific advancements such as modern photographic camera, visual device, mind preparation software, calculation, PowerPoint existing, and 3D imagining gearing have all created a plethora of bases for Impact to help scholars grasp a concept with ease.
- It must be recognized that a visual representation of a concept makes learning enjoyable and rewarding for the educated. They're able to participate more in class, and teachers have the opportunity to make their social class extra lively and engaging.

B. Globalization

- Some websites, such as www.glovisco.com, are used to link a group of students with an instructor from another nation to assist them learn a foreign language online.

C. No Geographical Restrictions

- At the university level, a number of foreign institutions have begun offering online degree programmes to which educated individuals can enroll.
- Nowadays, distance learning and online teaching have become an integral element of the educational system.

2.3 Destructive Impact

A. Reduced Writing Capabilities

- Today's young contemporaries' writing skills have deteriorated dramatically as a result of their excessive use of internet conferencing and crosscut.
- These entities, broods, are relying more and more on numerical communication, to the point where they've completely forgotten about their script assistances.
- They don't understand the orthography of antithetic terms, how to properly employ descriptive linguistics, or how to write in cursive.

B. Increasing Incidents of Cheating

- Technological advancements such as graphical calculating machines, high-tech tickers, mini digital cameras, and other comparable instruments have paved the way for exam swindlers.
- Educated people find it easier to draw expressions and lines on a graphing computer, with fewer risks of being caught.

2.4 Lack of Focus

- For many educated people, SMS or writing electronic information has become a favourite activity.
- Students are frequently seen interacting with their mobile phones, such as iPhones, whether throughout the day and at night, or when they are active and smooth.

Advantages

- It drives educated people even more insane to study.
- Assist students with a hectic schedule and the opportunity to work at their own pace.
- Teach students new engineering science abilities that they may apply in the workplace.
- Reduce paper and photocopy costs by promoting the "green rotation" concept.

Disadvantages

- Many professionals and experienced people believe that kids' imaginations are harmed and their thinking abilities are harmed as a result of such technology in education.
- From the teacher's perspective, it might be time-consuming at times.
- Installing such technology is expensive.
- When used in excess, it might cause health problems.
- Some pupils are unable to buy current computer equipment.

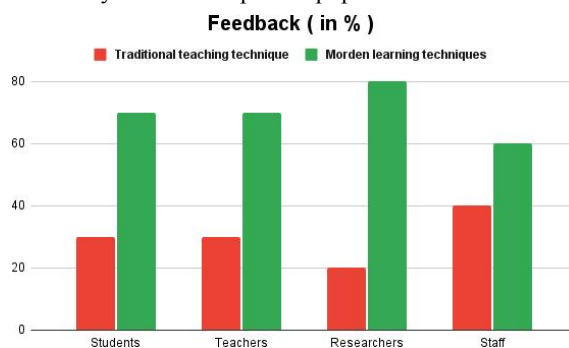


Fig. 2. Feedback on modern Technology usage.

BAR GRAPH SHOWING THE GROWTH OF MODERN TECHNOLOGY ON EDUCATION SINCE 1980s

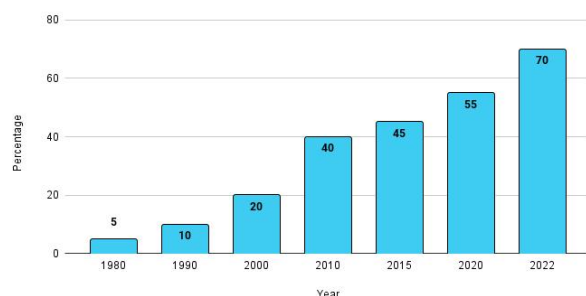


Fig. 3. Bar graph showing the growth of modern technology on education

III. CONCLUSION

Technology has a great impact on education, but it can also have detrimental consequences. Teachers and students should seize this opportunity in a positive perspective and reduce the barriers that are preventing many kids and schools from reaching excellence. As a result, it is past time for every country to implement a more technologically advanced education system in the future.

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