

THE IMPACT OF TECHNOLOGY ON EDUCATION

Dr. Shippra

Assistant professor (English)

Government degree College gunnaur babrala Sambhal,

Mahatma Jyotiba fule rohilkhand University Bareilly

ABSTRACT

The educational system is not exempt from the numerous ways in which society is being transformed as a result of the pervasiveness of technology. This research will discuss how advances in technology have influenced the presentation of material in the classroom as well as instructional methods. The introduction of new technologies has resulted in fundamental changes to the educational system. When it comes to their coursework at college, students not only have access to computers and other devices, but they also have quick access to research tools and other materials, and their instructors use technology to improve the impact of their courses.

Keywords: *Technology, Education, Teaching, Active learning*

INTRODUCTION

The traditional pillars of education are thought to have been things like schools, universities, professors, books, and articles. Students in today's decentralized educational system have the ability to acquire the resources they require regardless of where they happen to be located. Students' interest in learning has been increased as a result of the growth of technology in the classroom, which has made collaborative studies easier.

According to the theory presented in Steve Johnson's best-selling book "Everything bad is good for you" from 2005, the expansion of our capacity to access, assess, and assimilate knowledge results in an increase in our IQ. The employment of technology in the classroom comes with both positive and negative aspects.

Impact of technology on learning

The availability of educational opportunities for pupils has increased as a result of the role that technology plays as a facilitator in educational experiences. As a result of the proliferation of educational options brought about by technological advancements, obstacles to furthering one's education such as being ill or working a full-time job are no longer necessary. Students will be able to make the most of their time spent studying by employing the strategy that is most beneficial to them individually. Comparing the classrooms of the last decade to those of today reveals that the latter have undergone significant structural and functional shifts.

The classrooms of today are outfitted with a broad variety of technological tools, including cloud-based instructional resources, IFPDs (Interactive flat panel displays), computers, and cellphones, to name a few.

Students have access to the resources they need to become more independent as a direct result of the integration of technology into the classroom. Technology is no longer a luxury in light of the current state of affairs; rather, it has become a necessity.

What kind of impact does technology have on the education of students?

- Communication
- Convenience
- Control

Only when they are used efficiently can today's technologies be beneficial to educational endeavors. It is indisputable that pupils would rather read on a tablet or smartphone rather than a conventional book, despite the fact that many parents and teachers would prefer that their children not use tablets and smartphones. This extends the length of their education as well as increasing its depth. In addition, the online interface encourages collaborative learning because it enables students to converse with one another and provide support to one another with concerns that are linked to the course.

Impact of technology on teaching:

As a result of advances in technology, the amount of pressure that has been placed on teachers to impart their knowledge to their pupils has been reduced.

Students have reported feeling more engaged and stimulated during classroom presentations since the introduction of technologies such as overhead projectors (OHP), animated computer programs, and other forms of audio-visual aid. The internet is a wonderful tool for educators who want to better their own knowledge because there are several websites that provide information on any and all topics that can possibly be imagined.

Instructor to Group Leader

The conventional function of the teacher in the classroom has evolved into that of a facilitator as a result of the growth of smart learning and other technology advancements in the educational sector. In today's high-tech classrooms, the primary responsibility of teachers is not to educate pupils but rather to provide assistance to them. The term "learning" is gradually becoming more popular in place of the older term "teaching" in today's schools and lecture halls.

There is no doubting that the introduction of technology into classrooms has resulted in a number of positive changes, including making lessons more interesting and accessible to students and increasing both their focus and involvement.

Commonly used online resources for teaching

As the number of pupils in a class rises, teachers are forced to rely more and more on cutting-edge technology gear in order to keep their students' attention. Seven out of ten teachers agree that the implementation of technology advances in the classroom improves the conditions under which they work. The following is a list of some of the most cutting-edge teaching resources available today.

Clickers:

This device, known as a student response system, is designed to seem like a TV remote and gives pupils the ability to instantly poll their teachers regarding their level of comprehension. The clickers transform into a gadget capable of two-way communication when they are inserted into the USB port of a laptop.

Kindle:

It is a multifunctional tablet that provides access to the online store operated by Amazon. You have access to millions of e-books, journals, and newspapers with the click of a button. Students who want to broaden their vocabulary can benefit from using this simple and inexpensive tool, which contains helpful features such as text-to-speech and configurable typefaces.

White board with interactive features:

Whiteboards enable the entire class, including the instructor and students, to view the outcomes of collaborative efforts and conversations taking on in the classroom at the same time. It comes with a digital eraser, a pen, and software for organizing lessons already installed on it. With the assistance of an interactive white board, educators have a better chance of capturing their students' attention.

Coursera:

Andrew Ng and Daphne Koller, both of whom were teaching computer science at Stanford University at the time, established Coursera in 2012. Students can view video lectures and complete assignments while also connecting with one another in online forums and setting up in-person study groups using the platforms. The MOOC sites collectively offer more than 600 distinct courses in fields like as business, computer science, and mathematics, amongst others.

OBJECTIVES

1. To study technology on education
2. To study education

Technology's Undeniable Effects on Learning

From the moment we open our eyes in the morning to the moment we close them for the night, we are reliant on technology in one form or another. Even if there are some applications of technology that are helpful in the modern world, the negative effects of technology vastly exceed the positive effects.

Distraction:

Many students in today's society rely on technology as their main means of study, rather than using it as a supplement to the school curriculum. Whether they are at school or at home, they frequently abandon their studies in favor of distractions such as texting, social networking, gaming, and even shooting selfies. The repercussions of this kind of disruption are not limited to a momentary delay in production; rather, they may have ramifications that linger for a longer period of time.

Mental health:

The over reliance on technology by students will have a negative impact on the quality of their education. The students' ability to think analytically and critically has worsened as a direct result of improvements in technology that have made it simpler for them to locate and use material for their academic work.

Physical health:

Any electronic device, regardless of its specific make or model, can be harmful to human health due to the radiation it emits. It has been demonstrated that focusing one's attention on a screen for a lengthy amount of time is detrimental to one's health. Students who use earbuds on a regular basis run the risk of experiencing irreversible hearing loss, despite the fact that they can give them a more immersive listening experience. The increased possibility that children will use technology to study for longer amounts of time raises the risk that they will become overweight and stressed out from sitting still for an excessive amount of time.

Because of the potential for these technologies to have adverse impacts on the students' physical health, they may be impeded from realizing their full potential as a result of their usage of educational support technology in the classroom and at home.

Social health:

Face-to-face interaction should be maintained on a consistent basis since it is essential to the development of healthy social skills. It may appear that worldwide networking, which is made possible by technology, would bring people together; however, the reality is that it merely replaces connection that takes place in person, which results in feelings of alienation and loneliness. The creation of a personal connection, empathy, and student confidence are all hampered by the absence of nonverbal signs in digital communication. These indicators include eye contact, tone of voice, and facial expressions.

The Role of New Educational Technologies

According to the most recent findings of study on how students of today utilize technology and how it affects their education, it appears that giving students access to materials that are at the cutting edge of their respective fields can boost both learning and student engagement. When technology is used to their benefit, they find that the experience is both more engaging and intriguing. It is now possible to share knowledge in a manner that is both more efficient and more effective. This hints that our brains, with the assistance of today's technology, are capable of operating at a significantly quicker speed in any domain, including learning. Even in educational institutions such as schools and universities, it is impossible to resist being dependent on anything that simplifies daily life in some way. This is an unavoidable reality.

Possession of and Connection to the Internet

Over the course of the last ten years, the importance of the internet has skyrocketed, growing by a factor of ten. At this time, there is no room for debate on the value that it contributes to the sector of education. Children are aware that the advantages of the internet outweigh the potential dangers posed by cons and other issues. The internet has become deeply embedded in almost every aspect of contemporary life. Access to the internet is possible from a wide variety of electronic devices, including our televisions, game consoles, and mobile

phones. Students in higher education can benefit from the abundance of online resources that are at their disposal to advance their education and perform exceptionally well in their classes.

Technology for Display and Projection

In almost all circumstances, pictures are significantly more interesting than words. One other fantastic technical application is the improvement of education through the use of projectors and other visual aids. The most prestigious educational institutions all around the world rely heavily on the use of high-quality PowerPoint presentations and projections to make the learning experience in the classroom more interesting and pleasurable for their pupils. It has been demonstrated that increasing the use of technology in educational environments, such as projectors and other kinds of technology, leads to increased student engagement and enthusiasm. Students will rather examine thought-provoking pictures and material than read lengthy chunks of text if given the choice. Education can be accomplished more swiftly and efficiently with the assistance of technological tools.

Impact of Technology on the Academic Community

In the most recent few years, there has been an increase in the utilization of digital media in educational settings such as classrooms. Students now have the capacity to communicate with one another and get help with their assignments at any time of the day or night thanks to the broad availability of the internet. As the capabilities of digital media continue to advance, more resources that can assist children in their academic development and overall growth will be developed.

Technology-Assisted Online Degree Completion

In recent years, it has become increasingly usual to earn a degree through online coursework. People are ready to extend their horizons and develop their resumes by taking advantage of the online education possibilities that are available to them. Because of the internet and other advances in technology, the most prestigious educational institutions are now producing exceptional web programmers. As word gets out, there will be an increase in the number of persons discussing this topic. Students who are employed full-time and place a premium on educational flexibility are more accustomed to the global online course landscape.

The Value of Technology in the Classroom

Technology is implemented in the classroom in four different ways: as a component of the curriculum; as a tool for the delivery of lessons; as a support for instructors; and as a tool for improving learning in general. The educational process has gone from being one that is receptive and passive to one that is active and aggressive as a direct result of the development of technological capabilities. In both the business world and the academic world, education is an extremely important factor. The first option requires personnel to undergo retraining so that they can carry out their jobs in a different manner. When it comes to the second scenario, the objective of teaching youngsters is to inspire reverence within them. No matter anything else takes place,

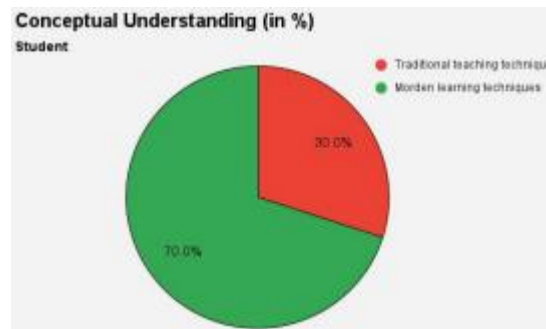


Fig. 1. Students' Conceptual Understanding with the Aid of Modern Technology

CONCLUSION

The development of new technologies has brought about a number of shifts in the ways in which we live our lives. Integrating various forms of technology with tried-and-true instructional methods has been shown to improve students' academic outcomes. The advancement of technology has made many things that were formerly complicated or even impossible much simpler and more efficient. It is entirely up to individuals whether they utilize technology in a beneficial manner or whether they permit it to distract them from their aims.

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