

Impact of Modern Technology in Education

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Abstract - It is the cradle of civilizations, the arts, and the sciences. Because of technological breakthroughs, our way of life has certainly changed.

Simple access to information; easy information retention; greater storage of information; better presentation of information; education became more interactive; easy knowledge sharing; and increased enthusiasm in learning. Since the introduction of technology, the area of education (teaching and learning) has transformed. It has been simpler for instructors to convey knowledge and for pupils to learn it with the introduction of computers in classrooms.

Without a doubt, technology plays a crucial role in every facet of life. A variety of manual tasks can now be automated thanks to technology improvements. As a result of the usage of technology, life has changed for the better.

Technological breakthroughs have changed the face of education. The importance of technology in the classroom cannot be emphasized. Indeed, the use of computers in the classroom has made it easier for teachers to impart knowledge and for students to absorb it. As a result of the use of technology, teaching and learning have become more enjoyable.

Key Words: Education, modern technology, teaching

1. INTRODUCTION

It is seen as a foundation for economic progress. In today's world, an economy that is technologically deficient can never flourish. This is due to the fact that technology makes our jobs simpler and faster. The effect of technology can be seen in almost every industry, and education is one of them.

2. Modern technology in education

According to the most recent research on how modern students choose to use technology and how technology affects their learning, it was discovered that when students utilize current equipment, technology, and tools, their learning and interaction improves. When technology is used to assist them, they find it to be lot more participatory and full of intriguing places. Knowledge transfer becomes incredibly simple and convenient, as well as very effective. What this means is that, when supported by contemporary technology, our minds now tend to operate quicker in every aspect of life, including schooling. The reliance and reliance on such an innovation, which makes life so much easier,

Even at schools, universities, and colleges, a pleasant voyage is unavoidable these days. Students can utilise technology in the following ways today:

Internet connection and round the clock connectivity



Figure 1: Internet connectivity

The internet is virtually everywhere, from television to game consoles to our phones. Students may find a lot of useful information on the internet, and they can get a lot of aid, tutorials and other types of helping material that might be utilized to boost and increase their academic performance

Using projectors and visuals

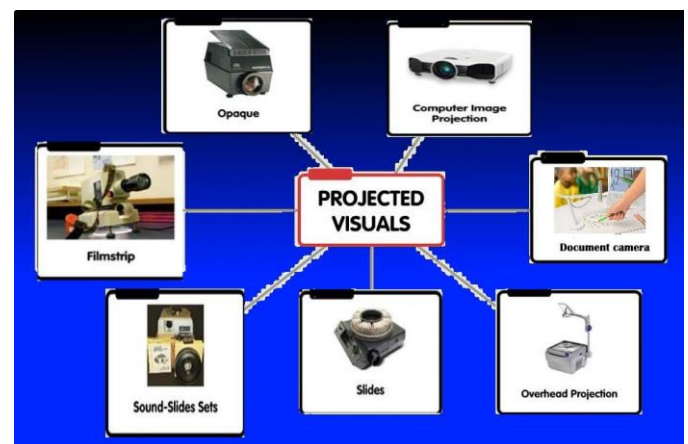


Figure 2: Projected Visuals

When compared to words, visual pictures usually have a great attraction. Another excellent technical use is the use of projectors and graphics to enhance learning. To make learning engaging 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, may increase engagement and interest while also improving motivation. Instead of merely reading text, students like to see enticing pictures and something that

encourages them to think. When it comes to technology, the learning process also becomes rather efficient.

Digital footprint in the education sector

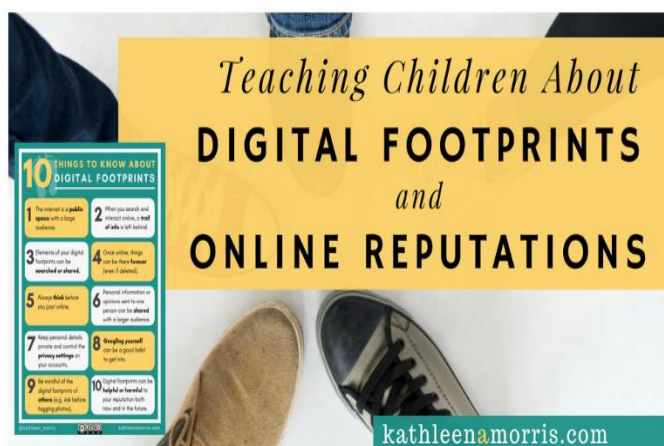


Figure 3: Digital footprint in Education Sector

Online degrees with the use of technology



Figure 4: Online Studies and courses

Online degrees have grown quite popular in recent years. Students who working and want they want flexible education programmers are more familiar with the online degree scenario throughout the world.

2.1. Importance of technology in education

Technology can assist them in achieving this goal. According to the World Economic Forum, while technology can assist young pupils in learning and acquiring information via play, it's critical to be flexible during these tough times.

Education is essential in both the economic and academic worlds. In the former, education or training is used to help workers accomplish things differently than they did previously. In the latter, the goal of education is to cultivate curiosity in the minds of students.

Increased Collaboration and Communication

Collaboration can be aided by educational technology. Teachers can connect with students during the course, but students can also speak with one another. Students collaborate to solve challenges in online classrooms and learning activities. Students can share their views and ideas and encourage one another in collaborative work. At the same time, technology allows students to speak with instructors one-on-one. Students get the opportunity to ask questions about what they're learning in class and receive extra assistance with tough subjects. Teachers can access and view completed assignments on their laptops, and students can upload their homework from home.

Personalized Learning Opportunities

You can access instructional information 24 hours a day, seven days a week thanks to technology. Online courses can be completed fully on a laptop or smartphone. In both cases, technology may be utilized to personalize learning strategies for individual pupils. Teachers can construct classes depending on the interests and talents of their pupils. Students may learn at their own speed, which is a nice perk. Students can refer back to the videos in the lesson plan when they need to study class material or gain a better understanding of key ideas.

2.2. Factors affecting technology in education

Jung discusses the great problem that contemporary society's instructors face as a result of the fast proliferation of information. Teachers must learn how to employ current technology in their teaching in order to keep up with the times.

Creative Learning: 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.

Integrative learning: 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 element.

Evaluative learning: The usage of ICT in the classroom is student-centered and delivers meaningful feedback through a variety of interactive elements. Instead of memorizing and rote learning, ICT allows students to investigate and learn through innovative approaches of teaching and learning that are supported by constructivist theories of learning.

2.4. Positive impact

1. Enhanced Teaching and Learning:

Technological advancements such as digital cameras, projectors, mind training software, laptops, Power Point presentations, and 3D visualization tools have all proven to be valuable resources for teachers in assisting students in grasping concepts.

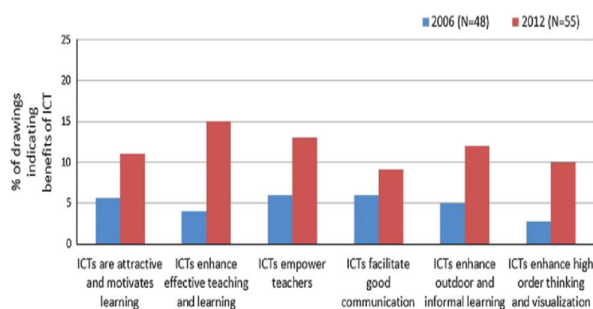


Chart 2: Impact of ICT -2

Visual explanations of topics, it must be grasped, making learning pleasant and engaging for kids.

2.Globalization:

read it When students attend school in various regions of the state, they can use video conferencing to "meet" their peers without leaving the classroom.



Figure 5: Internet impact on world

Some websites, such as www.glovico.com, link a group of students with a tutor from another nation to assist them learn a foreign language online..

3.No Geographical Limitations:

With the development of online degree programmes, actual attendance in the classroom is no longer required.

Distance learning and online education have become increasingly significant in today's educational system.

3.Negative impact

1. Declining Writing Skills:

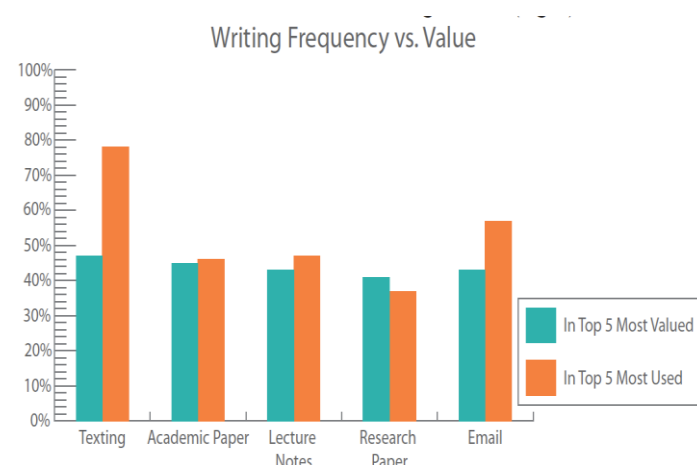


Chart 4: Writing Frequency vs Value

2.Increasing Incidents of Cheating:

Technological advancements such as graphical calculators, high-tech watches, small cameras, and other comparable devices have become excellent test cheating tools.

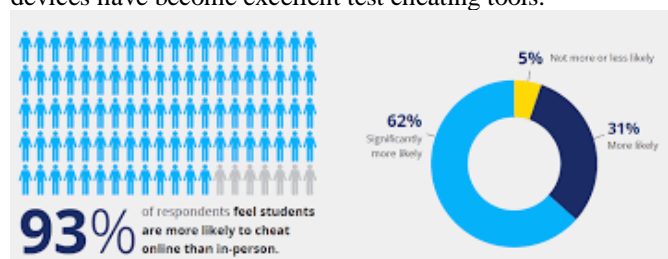


Chart 3: Disadvantage of online studies

In the sphere of education, technology has made teaching and learning a lot easier, but on the other hand, excessive use of technology has had a negative impact on our physical and mental health in some circumstances

Technology and Students distraction:

Students understand that technology is a fantastic and open source of learning for them, but as they become more comfortable with it, the majority of them begin to utilise it badly.

Students may more readily scribble calculations and notes on graphing calculators, with fewer chances of being spotted.

3. Lack of Focus:

For many students, text messaging (SMS) has become a favorite hobby. Playing with phone.

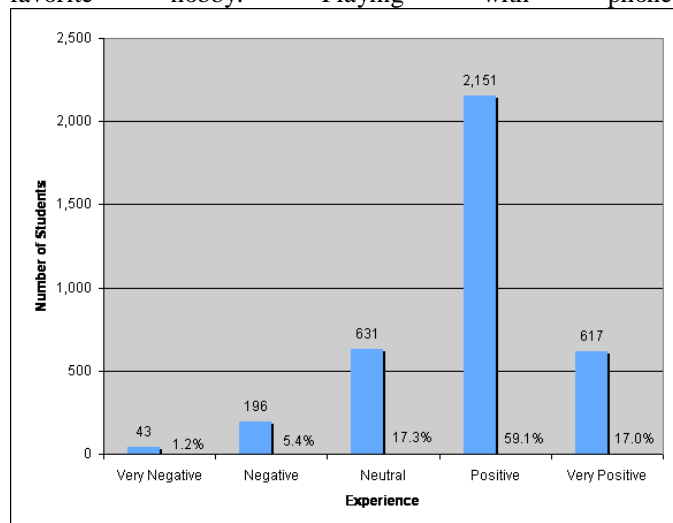


Chart 5: Lack of Focus

Being constantly linked to the internet has resulted in a lack of attention and concentration in academics, as well as sports and recreational activities to some extent.

Both students and instructors can profit from current information. Instructors may use the internet to get the most up-to-date material, which will help both students and teachers.

The problem with our current educational system is that our professors are not up to speed on the most recent and relevant material, and consequently give their pupils obsolete information.

The internet has made information exceedingly basic and easy to understand.

- Students may use technology to explore and learn new things, which will help them flourish in their chosen area.

Students would not be able to learn new things on their own without the help of technology since they appear to be completely reliant on their teachers for the learning process.:

- Internet-based learning is also known as remote learning. The following factors contributed to the ease of learning:

- Technology made distant learning simpler because information was freely available on the internet.

- Technology made distance learning easier because retrieval of inf

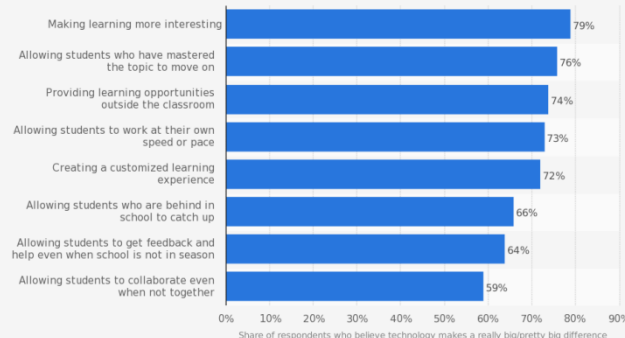
3.1. Advantages

It increases kids' motivation to learn.

Help students with hectic schedules by allowing them to work from home on their own time.

Students should be taught new technology abilities that they may apply in the workplace afterwards.

Perceived positive difference of classroom usage of education technology according to educators in the United States in 2016



Source: DeVos, © Statista 2017

Additional Information: United States; Devotee: 2016; 2,600 Respondents: 18 years and older; Prof: 12 classroom teachers in public or private schools; parents of children under age of 18, who, if they have school-aged children do not home-school their child; children in

statista

Reduce the cost of paper and photocopying while promoting the "green revolution" notion.

1. It provides credibility for the teacher.

Today's youngsters have never experienced a time when modern technology was not available. They didn't have to wait 45 minutes for a new website to load since they were using a sluggish dial-up modem. It will never be known what it's like to be in an AOL chat room. Teachers that embrace technology provide their expertise a degree of legitimacy for this age, allowing for instructional applications in a variety of areas. Even a single technology gadget may have a significant influence on today's student.

2. It is providing access to numerous resources instantly.

It was not long ago when students were required to bring their textbooks to class every day. Most of those textbooks, thankfully, are now available online and can be accessed on a computer. To make the learning experience more effective and successful, organizational platforms operate in combination with e-books and other technology resources.

3. It automates the boring stuff.

For professors, technology in the classroom is critical. There are many tools available today that can help automate the grading process. Software systems make it easier to track individual student performance, enabling for speedier detection of learning gaps. When more of the tedious labour that teachers do every day is delegated, there is more time for meaningful instruction and less time spent at home analysing work.

4. It creates a collaborative learning approach.

When students of any age are exposed to a lecture-style learning environment, the quantity of knowledge they recall can be as low as 5%. The classroom experience for many pupils was predicated on a "expert" utilising their classroom soapbox to spread knowledge. Collaboration has become a reality in the classroom thanks to technological advancements. Students who learn in a group setting can remember up to 80% of the knowledge they are taught. Information retention levels for certain students might approach 95 percent when interactive practise is included in the classroom setting.

5. learn core vocational skills.

Today, almost everyone has access to the internet. When technology is brought to the classroom, students learn how to limit personal information in a secure atmosphere. When it comes to internet communication, they can acquire good writing etiquette. They are given the opportunity to prepare presentations. They create papers that adhere to formatting rules. They learn how to do fresh research and how to properly cite the information they uncover. These are all important abilities in today's industry, and today's students have the chance to master them before ever seeking for work.

6. reflect modern times.

When students go into their classroom each day, they should be able to see into the future. Stepping back in time may bring some pleasure via nostalgia, but it will not prepare them for the demands of a technologically based world. We may surely benefit from past teachings, but we must also be prepared for what the future may offer once the curtain is lifted.

7. data into one location.

Technology allows instructors to aggregate and utilise all relevant information on their pupils through numerous platforms and apps. This might include everything from their attendance record to their arithmetic abilities. Once acquired, this data may be utilised to pinpoint areas where an intervention would be beneficial. It can also assist teachers in grouping kids who would benefit from learning together rather than separately.

8. own comfortable pace.

School routines are still rigorous, but technology helps to break down some of the barriers. Students may work at their own speed thanks to technological advancements. To improve the learning process, curriculum demands or programmes may be altered more easily to fit unique requirements. If the stimulation of a classroom is too much for a learner, it can also be employed for remote learning possibilities.

9. learn different ways.

When technology is incorporated in the classroom, students have more influence over the learning process. It's an opportunity for children to use their innate curiosity to discover their interests, abilities, and skills. Technology also allows pupils to attempt new things that they would not have been able to do in the past. This helps students to figure out on their own which tactics are most helpful in helping them learn new stuff.

10. boost learning motivation, and how

were you dreading it since you'd been bored for the majority of the day? In the classroom, technology can help students become more motivated to study. The majority of children like utilising technology in some capacity. It helps active learners to stay interested in the sessions while also encouraging non-active learners to find something "interesting" to do. One of the most significant benefits of technology in the classroom is an increase in motivation.

3.2. Disadvantages

Many specialists and experienced persons believe that such technology in education damages children's imaginations and their ability to think.

It may be time demanding from the teacher's standpoint at times.

It is costly to install such equipment.

Some students are unable to purchase modern computer equipment.

1. It can be distracting to students.

Access to technology may be as addictive as alcohol, drugs, and other vices. The typical person in the United States checks their smartphone roughly 100 times every day, students may try to access other aspects of the online experience. Only clear boundaries and expectations can alleviate this problem, allowing technology to give a much-needed learning opportunity.

2. face-to-face relationships.

When individuals believe they can be anonymous, they lose control over their words and actions. Some people even avoid face-to-face contact in favour of the comfort of a screen, words, and emoticons. That is why technology should be used in the classroom as a tool. It cannot be the sole component of a student's learning process.

3. It can make it easier to cheat.

When individuals believe they can be anonymous, they lose control over their words and actions. Some people even avoid face-to-face contact in favour of the comfort of a screen, words, and emoticons. That is why technology should be used in the classroom as a tool. It cannot be the sole component of a student's learning process.

4. students at a disadvantage.

In the United States, one out of every five children lives in a family where food security is not guaranteed. Incorporating current technologies into their life is a secondary consideration. It's preferable to have a pantry full of vital goods than a new iPhone in your pocket. To be a successful learning tool, schools must give equitable access to technology to all students. Barriers to accessing free resources, such as computer access at a library, must be addressed. This problem can only be solved through sharing.

5. It can replace the teacher.

Many software learning aids have instructional features built right into the programme. Apps work in the same way. Students can interact with a programmed online teacher while they finish learning classes using a programme like ABC Mouse. As a result, the instructor is forced to take on the role of observer or manager. Teachers will never be obsolete, but technology in the classroom can already replace much of what

they used to do. That implies that rather than building a tailored curriculum to apply, the future of education may lay in participating in the development of new technologies.

6. It can create issues of privacy.

In the United States, an estimated \$16 billion was stolen from 15.4 million people in 2016. Between 2011 and 2016, identity thieves stole almost \$107 billion from victims, according to Javelin Strategy & Research. Students' privacy is jeopardised every day when they are exposed to new technologies. Despite the fact that most apps and software have robust privacy protections, there is no way to totally eliminate the hazards inherent in this sector.

7. medical issues for some students.

Irritation of the eye, weariness, and even impaired vision are some of the symptoms that can arise when this happens. It might potentially develop to "Computer Vision Syndrome," a more serious ailment. According to CBS News, youngsters who spend a lot of time on computers are more likely to develop early myopia. Myopia affects roughly 60% of children and adolescents aged 12 and above.

8. It may cause children to lose track of time.

This encompasses more than simply their vision. When children use a gadget with a screen, they frequently lose track of time. This results in extended durations of sitting, which can lead to hyperactivity, obesity, and other problems. It can also disrupt sleep patterns since the child's normal circadian cycle is disrupted.

9. It is often limited.

In the classroom, technology is frequently restricted to word processing and rudimentary research. For political or personal reasons, many modern technology applications are either prohibited or partially prohibited. This reduces the usefulness of technology and changes students' learning chances in a negative way.

10. It can create a dependence.

Do you make an effort to recall stuff from your memory? Do you do a web search or enlist the help of a virtual assistant such as Siri to get the answer for you? Technology may provide you access to a huge quantity of information, but it can also make you reliant on it. Students who are constantly exposed to technology may be irritated by the concept of reading a genuine book. They may even be averse to going outside for recess or taking part in family activities.

4. Conclusion

Technology has a positive influence on education, but it also has the potential to be harmful. Teachers and students should view this as a good chance to break down the obstacles that are hindering many children and schools from achieving success.

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