

IMPACT OF DIGITAL TECHNOLOGY ON THE EDUCATION & LEARNING

**Sushma Sharma*

**(Tech Asstt.), Department of Computer Sc. & Applications*

ABSTRACT

Human Intelligence is a gift of God & technology is a gift of this Intelligence. Mankind has put this gift to the best of its use. Technology plays a key role in every sphere of life. Technology especially the Digital technology has revolutionized the world of education. Information, Communication, and Digital technology (ICT) has helped teachers in replacing the traditional teaching methods with the digital technology-based teaching and learning tools. With the increasing use of computers in education sector, teaching & learning has become easier for the teachers & students respectively. It has made the process of teaching as well as the process of learning all the more enjoyable. Technology especially the Digital Technology has even become a part of students' curriculum now days in both schools and colleges. So, it is safe to say that Digital Technology plays a huge role in every student's life as well as education. But along with the considerable pros, it has some cons as well which cannot be neglected. For the future studies, there is a need for consideration of other aspects of ICT integration especially from management point of view in regard to strategic planning and policy making.

Key Words: Education, modern digital technology, teaching.

INTRODUCTION

In this modern world, Digital technology plays a very important role in our life. Digital technology makes our work simpler, easier and less time consuming. This impact of digital technology can be seen in the field of Education as well. According to some latest studies, the use of modern digital technology and tools, has increased the learning and interactivity of the students. Learning gets much more interactive & interesting when aided by digital technology. The transfer of knowledge becomes very easy, convenient, and effective. When assisted with digital technology, even our minds tend to work faster. Integration is effective for both teachers and the students. According to a survey conducted in Malaysia among teachers from various schools it was analyzed that ICT integration has proved to be greatly effective for both teachers and the students. Findings indicated that if teachers had a well-equipped preparation with various ICT tools and facilities, technology-based teaching and learning proved to be extremely successful. It was also found that professional development training programs for teachers also played a key role in enhancing students' quality of learning and education.

ICT in Education

ICT or Information, Communicating & Technology refers to technologies used for collecting, storing, editing and passing on information in various forms. Use of a PC is an example of use of ICT in education. Multimedia is also a frequently used term to refer to some data carriers such as CD-ROM, floppy disc etc. In the field of education, ICT has a huge impact in the schools and colleges curriculum. ICT as a field of study in different professional disciplines such Information technology, Computer Science, Software Engineering, Data Communications, Computer Engineering, Management Information Systems, Mobile Computing, among the many others. ICT has transformed teaching, research and learning processes at all levels. It empowers teachers as well as students in making significant contributions to the field of education. Students can make use of ICT in education in the following ways:

1. **Round the clock Internet connectivity**– The usage internet has grown aggressively over the decade. Its importance in the education can never be undermined. Despite the chances of fraud, the use of the internet is like a blessing for students as well as teachers. Internet is something that is used in almost everything that we do. From television to gaming, and phones, the internet is in everything & everywhere. The use of the internet makes it very convenient to students to find various kinds of help, tutorials and other kinds of assisting material. Using Projectors and Visual images has made it convenient for the teachers to teach effectively.
2. **Using projectors and visuals to aid in learning**- This is another form of great technological use. Top institutions around the world, now rely on the use of PowerPoint presentations and projections in order to keep the learning interactive and interesting. Use of projectors in schools and colleges helps in improving interaction and interest. Appealing visuals makes studying easier than just reading words. The learning part also becomes pretty easy and effective when it comes to digital technology.
3. **Online degrees with the use of digital technology**- Online degrees now have become a very common phenomenon. Students can easily take up online courses for learning and certifications. Amazing online programs with the use of various applications and the internet are available now days. This will continue to rise & get more

support in coming time. This online degree scenario is famous around the world especially among students who work and look for flexible studying programs.

IMPORTANCE OF DIGITAL TECHNOLOGY IN EDUCATION

Following are the role of digital technology in the field of education:

1. It is included as a part of the curriculum such as IT & Mobile Computing
2. It is also used as an instructional delivery system.
3. It is used as a means of aiding instructions.
4. It is also used as a tool to enhance the entire learning process.

Because of digital technology, education has changed from passive and reactive to interactive and aggressive. Education is extremely essential in both corporate and academic field. In both the cases, digital technology can help students understand and retain concepts better.

FACTORS AFFECTING DIGITAL TECHNOLOGY IN EDUCATION

The enormous challenge that teachers face in our society due to the rapid expansion of knowledge is that the modern technologies are demanding that teachers learn how to use these technologies in their teaching. Hence, these new technologies increase a teacher's training needs. So, it is safe to say that a teacher's attitude towards digital technology is a key factor in the successful implementation of ICT in education. But a teacher might not always have positive attitudes towards computers and their poor attitudes may lead to a failure of the computer-based projects. Some common cause of this can be lack of time, lack of access, lack of resources or lack of expertise. Hardware failures, incompatible software between home and school, poor or slow internet connectivity and out dated software which are available mostly at school while the students/educators are having more up-to-date software at home are some more examples of technical failures.

POSITIVE IMPACTS OF DIGITAL TECHNOLOGY ON EDUCATION

Some positive impacts of Digital technology on our education are as follows-

1. **Enhanced Teaching as well as Learning:** New technological advancements such as digital cameras, projectors, various software, Power point presentations, 3D visualization tools are some effective tools for teachers to help students in grasping a concept easily. This visual explanation of concepts makes learning fun and enjoyable for students. It also helps students in participating more and even teachers get a chance to make their classes more interactive and interesting.
2. **Globalization:** All these technological advancement helps students in learning anything and anywhere from the world without the need to leave their houses. For e.g. some websites help students in learning foreign languages online by pairing a group of students with a teacher from another country.
3. **No Geographical Limitations:** These technological advancements also brought with them the online degree programs. Now there is hardly any need of being physically present in the classroom. Several foreign universities have started this type of online degree courses that students from any part of the world can enroll in. Distance learning and online education have become a very important part of the education system now a day.
4. **Better Learning Experience** –Due to new and innovative learning ideas, it makes students more excited to learn via new adaptations in learning.
5. **Time Management** - It helps students with busy schedules, by providing them freedom to work at home on their own time according to their wish and time.
6. **Future perspective-** It helps in training students in learning new technical skills which can be helpful for them in future in their work place.
7. **Ecological Benefits** - It also decreased the use paper and photocopying costs, thus somewhere beneficial for the environment

NEGATIVE IMPACT

Some cons of Digital technology on our education are as follows-

1. **Poor Writing/Grammar Skills** - Due to constantly being busy in online chatting and shortcuts, the writing skills of students now days have declined quite tremendously. Now, children rely more and more on digital communication that they have totally forgot about writing. They might not even know the spelling of different words, or how to correctly use grammar or even how to do cursive writing.

2. **Increasing Incidents of Cheating-** Technological developments has also brought with them new gadgets such as graphical calculators or high tech watches or even mini cameras and similar equipment that have become great sources to cheat in exams. It also gets easier for students to cheat via these gadgets with least chances of being caught.
3. **Lack of Focus-** SMS or text messaging or online chatting has become a favorite pastime of many students. Students can be seen using their cell phones day and night or while driving and very often between the lectures. Due to being always connected to the online world, students can have issues like lack of focus and concentration in academics. This ever-connectedness also affects their sports and extracurricular activities.
4. **Diminishing thinking ability -** Students imagination is affected, their thinking ability is reduced due to digital technology, according to many experts and experienced people.
5. **Extra effort from teachers -** Sometime it's also time-consuming from teacher's point of view. Over usage can cause health issues as well.
6. **Costly Installation -**It is costly to install such digital technology for both educational institutions as well as students. Some students can't afford modern computer technologies.

DIGITAL TECHNOLOGY IN EDUCATION DURING COVID-19

During COVID-19 schools are shut all across the world. Almost around 1.2 billion students could not attend the school. As a result, education policy has been changed dramatically, with the distinctive rise of e-learning, whereby teaching is done on digital platforms. Many online learning websites are offering free access to their platforms. Students are getting information and education at home with the use of technology. Smart class rooms systems by schools and colleges is transforming the traditional style of education system into modern style and it is much needed.

This pandemic has forced us to use the Digital Platforms. This boost in demand for Digital Platforms shows the need for Digital Technology. Quality of education in India is improving with the use of technology. Connecting students and teachers through digital platforms and necessary software through the use of laptop or phones is the latest transition in education trying to eradicate the physical need of teachers or classrooms. This is an ideal time to accept technology and its latest offerings in order to make education delivery to students more efficient and make it more productive through online learning and assessments

The adoption of technology in education has led to an unprecedented transformation from teacher-centric education towards student-centric education. Virtual classrooms and various online tools are helping to continue and enhance the engagement between the teacher and students as close to the classroom type experience. Going forward, smart classrooms are making everything possible from teachers and parent meetings to staff/management meetings, providing the necessary interactivity.

CONCLUSION

Technology has a positive impact on education and at the same time may also pose negative effects. Teachers and students should take advantage of this in the good light and eliminate the drawbacks which are pulling back many of students as well as schools from achieving excellence. It is thus time to introduce a more technologically equipped education sector in the future.

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