THE ROLE OF TECHNOLOGY IN EDUCATION

Kanika Budhwar
Lecturer in CS,
F.C. College for Women, Hisar

***Abstract*-The era of 21st century is often regarded as the era of technology. Today, technology plays an important role in our life. It is possible only through technology that distances are no more barriers and education can be brought to the student's doorstep. The impact of technology can be felt in every possible field and one such field is education. Education in its general sense is a form of learning in which the knowledge, skills and habits from a group of people are transformed from one generation to next through teaching, training and research. Today, more than ever, the role of educational technology in teaching is of great importance because of the use of information and communication technologies (ICT). Educational technology is an organized process of applying modern technology to improve the quality of education. It is a systematic way of conceptualizing the execution and evaluation of the educational process, i.e. learning and teaching and help with the application of modern educational teaching techniques. The paper is a conceptual attempt to explore the new roles of technology in education which has increasingly become more than a sole medium, as was its description in the past.**

Keywords- Education, technology, teaching, ICT

I. INTRODUCTION

In the world that we currently live in, technology is a vital factor. With each passing day a new software or gadget is being brought into the market that serves to improve our lives in one way or another. Technology plays a major role in every field and one such field where its presence is utmost is in education sector. With the advancement in technology, education among the people has begun to proliferate and there is continuous research and development going on in introducing advanced technologies to make education easier, joyful and accessible. Nowadays with the help of technology the education for children is no longer boring and cumbersome as the educational technologies have made it much more interesting and easy to use.

Study while playing has been made possible only by the new technology. Distance education is a great aid to students who were not able to pursue their degrees. Now due to rapid change in technology, distance is no more barrier.

Educational technology usage is broadly classified as:

1. Technology as a tutor

2. Technology as a Teaching tool

3. Technology as a learning tool

II. COMPARISON OF TRADITIONAL EDUCATION AND TODAY'S EDUCATION

Traditional and Modern education are both related to each other and also different from each other. In fact modern education is inherited from the traditional education. In the past there were no schools or institutions for children. They acquired the education or knowledge in gurukuls from their gurus who mainly focus on the rituals or customs. In contrast to this modern education focuses on reading, writing, arithmetic and religion. With the invention of new technologies the modern education was able to replace the indigenous education.

Why there is a need of technology in the classroom?

- It will help students to prepare for their future careers, which will include the use of wireless technology.
- The integration of technology into the classroom is a great way to reach the diversity in learning styles.

- It gives students the chance to interact with their classmates more by encouraging collaboration.
- Technology helps the teachers to prepare students for the real world environment.
- Integrating technology in education helps students to take interested in learning as they are excited about being able to use technology and therefore are more apt to learn.
  - Mobile technology is available in the classroom; students are able to access the most up to date information quicker and easier than ever before.
  - The traditional passive learning mold is broken with technology in the classroom the teacher becomes the encourager, adviser, and the coach.
  - Students can have access to digital textbooks that are constantly updated and often more vivid, helpful, creative and a lot cheaper than those old heavy books.

III. ROLE OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)

Information and communication technology (ICT) is a boom for students today as it has a significant and positive effect on student achievement. ICT basically includes television, computers, internet etc. when used appropriately it can strengthen, expand and raise quality of education. The use of computers and the internet for enhancing the quality of education by making learning more relevant to life has been seen as an ideal by educational institutions. The citizens of tomorrow who are our students now are going to live in the age of the electronic media. ICT can boost creativity and problem solving capability in students.

However, ICT also provides new tools that can be used in teaching science and technology. The whole range of conventional software is used, including databases, spreadsheets, statistical and graphical programs. In addition, modelling, visualization and the simulation of processes are important. ICT is also used for taking time series of measurements of a wide variety of parameters ('data logging').

Science and technology are likely to be key elements of strategies to develop ICT as a resource for promoting teaching and learning. It is also likely that science and technology teachers are better equipped,

by virtue of their training, for this task than many of their colleagues, although they, too, are likely to need to have their skills brought up-to-date by means of suitable training programmes.

IV. ADVANTAGES OF TECHNOLOGY IN EDUCATION

Easily access to learning material: - E-books, revision guides and past examination papers that are available on World Wide Web and students can take advantages of these to improve knowledge base.

Continuous learning: - With the help of information technology in education it is possible for students to keep on learning, irrespective of where they are even at home. This has greatly enhanced efficiency in the education sector.

Sharing of knowledge: - Students from all over the world can come together and can share the experiences; the geographical distances are no more barriers, it has been made possible only through technology.

Learning aids: - By using audio and visual materials, we can put some practical aspect to the theory taught in class, students can develop a better understanding of topics being taught.

Distance learning: - Now its possible to attend a college overseas without even getting out of your home country and at your own convenience. With the help of online courses anyone can get the second degrees or additional certifications.

Proper record keeping: - Unlike in the past when records used to be kept manually and there were many cases of lost files, the use of information technology in education has made it possible for safe and proper record keeping.

V. LIMITATIONS OF TECHNOLOGY IN EDUCATION

Access to inappropriate content: The biggest concern to the use of technology is that how easy pornographic, violent, and other inappropriate materials can be easily accessed and viewed.

A disconnected Youth: The harmful effect of technology is that when people are attached to their screens almost 24/7, which is causing an entirely new set of social issues to pop up.

Cyber bullying Trap: Giving students access to anonymous accounts and endless contact avenues can only lead to trouble. Cyber bullying has become a problem among young people today. This harassment has no end. There is no way to monitor or discipline students who are involved in it.

Inevitable Cheating: Easy access to information may seem like a great thing, it can become a real problem in a test taking environment. Cell phone have made cheating easier than ever.

A major Distraction: Attentiveness drops drastically in the classroom when students have their cell phones or other technologies out. The focus shifts from their teacher and education, to whatever they are looking at, playing, or doing on their phones.

VI. CONCLUSION

With technology, education has taken a whole new meaning that it leaves us with no doubt that our educational system has been transformed owing to the ever advancing technology. Now we can prepare students for their lifelong learning which requires new approaches to education that incorporate technologies increasingly as a part of students' everyday lives. It's accepted that a well-rounded education is a gateway to personal success. It sets students on a path to lifelong learning that enables them to succeed in ever changing world. Through education, individuals can expand their minds and embrace new ideas and opportunities, and at the same time, build better lives for themselves and their communities. In a world where geographic boundaries are blurring, students also need the flexibility to connect with and collaborate with people anywhere at any time—communicating information in more dynamic, engaging ways. In addition, it is necessary to consider the impact education plays in competitive economies, where once local industries now compete on a global scale.

For today's students to become tomorrow's leaders in science, technology, healthcare, the arts, and other areas, they -need to know how to use all the tools at their disposal. It is an exciting time to be teaching and we must seize this moment to challenge ourselves, our students, our administrator and policymakers throughout the country to help all teachers make the best use of the technology tools available to them.

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