

## Role of Information Technology in Modern Education Sector

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### Abstract

Computers play a key role in how individuals work and how they live. Many individuals use computers for education, entertainment and business purposes. Now we use ICT as part of or life. Information technology (IT) is the use of any computers, storage, networking and other physical devices, infrastructure and processes to create, process, store, secure and exchange all forms of electronic data. This paper outlines and reports the role of Information Technology in Education related to various aspects. The emergence and use of information technology (IT) in this century is a significant development affecting the teaching and learning. The use of IT for teaching and learning has been summarized, in the following aspects: Visual Learning Techniques, Video Conferencing, Chatting, E-Learning, computer-motion analysis and VOIPs. It is concluded that use of IT enormously improve the education sector.

### INTRODUCTION

Our world today has changed a great deal with aid of information and communication technology. Things that were once done manually or by hand have now become computerized operating systems, which simply require a single click of a mouse to get a task completed. With the aid of IT we are not only able to streamline our business processes but we are also able to get constant information in real time that is up to the minute and up to date.

Information Technology (IT) means by the use of computers we can store, retrieve, transmit, and manipulate data, or information for any enterprises. IT is considered to be a subset of information and communications technology (ICT). Now days IT plays a major role in the field of education. In simple words we can define IT Education as it is the process of facilitating learning, or the acquisition of knowledge, skills, values, beliefs, and habits with the help of a computer or any other electronic devices. Today computers can be found in libraries, classrooms and museums as a mean of education. With the coming of IT and Internet revolution, education has also moved on the World Wide Web platform. Many universities are using the internet for distance education and distribute their study materials and syllabi to students. Now E-learning is also available in internet to help students in education. E-Learning is learning utilizing electronic technologies to access educational curriculum outside of a traditional classroom. In most cases, it refers to a course, program or degree delivered completely online. There are many terms used to describe learning that is delivered online, via the internet, ranging from Distance Education, to computerized electronic learning, online learning, internet learning and many others.

IT changed the teaching and learning processes drastically. Searching for knowledge in the library and imparting them to the students by teachers in the library and book shops are no longer needed. Not only the required information's but the methodology of the pedagogy also available in the internet The teachers are now free to

use various facilities of the computer and communication advantages both in classroom and at their homework. The increased powerful and lesser cost computers and other information devices are made classrooms for most effective transactions. The teaching aids such as LCD projector and other audio visual devices make classrooms wonderful. The students can interact with experts and professors of other institutions with the help of interactive instructional initiatives. A number of learning tools simulations and instructional software are available in the web teachers can now able to expose students to outside places

### **Features of IT in Education**

#### **Technology makes teaching easy**

Using audio-visual presentations, our students will understand exactly how the knowledge is applied in practice. We can use projectors and computer presentations to deliver any type of lesson or instruction and improve the level of comprehension within the class.

#### **Technology helps you track student's progress**

Today, you can rely on platforms and tools that enable you to keep track of the individual achievements of your students

#### **Educational technology is good to the environment**

You can instruct your students to take online tests and submit their papers and homework through email. You can also encourage them to use eReaders to go through the literature you assign.

#### **Technology makes distance learning more accessible than ever**

Distance learning is one of the most trending learning methods. Virtual lessons are slowly taking the place of traditional lectures. Students can organize their time in a way that works for them, and they can easily gain the knowledge they are interested in.

### **Advantages of IT in education**

It can work from any location at any time

- It is less expensive to operate
- It can accommodate any number of learners
- It is flexible as the learner can select the timing according to his convenience
- It facilitates faster learning as the learner can move directly to the needed information
- It provides consistent knowledge as the information is retrieved from the same database
- It can lead to increased retention and a stronger grasp on the subject
- Online learning is flexible and students from different geographical locations can attend the same class with no need of traveling from those locations.
- It helps the student to understand the concept in a more accurate and perfect way.
- Easy to measure the performance of learner
- It helps students gain access to open educational resources
- Students find it easy to learn with technology because computers are patient compared to humans

### **Drawbacks of Traditional Education**

- Traditional learning method is possible within a classroom or in a campus
- It is more expensive
- It can accommodate limited number of learners

- Fixed timings has to be followed by all students
- Systematic way of learning is used
- All students are dependent on their professors in every study related matter
- For some students, it is complicated to keep the balance between education and extracurricular.
- A campus-based learning experience means the class schedule is predetermined and not subject to change
- Traditional training emphasizes passing tests, whether or not students under testing material.
- In traditional system, teacher is the only source of information. Students do not make the effort to learn new things themselves

### **Use of IT in Education**

IT is now being widely used in the classrooms to enhance and enrich teaching and learning the development of information and communication technology is contributing to many innovations in classroom activities IT enables teachers to work collaboratively with students while the teachers themselves become more immersed in thereon learning. IT's provides numerous tools that teachers can use in and out of the classrooms to enhance student learning. Teachers use ITs to:

- Present the material in more interesting and attractive way
- Guide and help students in searching the qualitative material
- Provide individualized instruction
- Direct the students toward co operative as well as collaborative learning activities
- Prepare learning materials for students rather than teaching in conventional methods
- Teachers students and parents can communicate via the internet
- Teachers can post grades and students and parents can view their grades via internet
- Students can learn from interactions with the information, interface , teachers and co learners using global networks
- Provides blended learning opportunities incorporate both face-to-face and online learning opportunities.
- Both students and teachers can collaborate in real time using advanced educational technologies
- Exchange learning experiences and information with others students and teachers living anywhere in the world
- Diagnose the learning problem of students and help them to overcome

### **CONCLUSION**

The future of the educational system is practically determined by the development of technology. IT applications can improve the learning process in education sector easier and accurate. The students and the teachers can both benefit. It is an integral part of education. The teaching aids such us LCD projector and other audio visual devices make classrooms wonderful. The students can interact with experts and professors of other institutions with the help of interactive instructional initiatives.

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