IMPACT OF DIGITAL TECHNOLOGY ON EDUCATION

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ABSTRACT

Advances in digital technology have opened up many avenues of learning. Technology has made information accessible from anywhere and all groups of people. Education has reached most parts of the world and ICT has become an integral part of human life. Computer technology has had a deep impact on the education sector, Thanks to computer imparting education has became easier and much more interesting than before. Computer is playing an important role in the information age. They deeply impact in many areas, undoubtedly, in the area of education to improve the quality of learning as well as teaching. This paper is well discusses the various usages of computers which make effective learning as well as a teaching process.

Keywords: *Computer, Education System, Learning, Teaching, IT (Information Technology).*

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Introduction

This is the era of information and technology (IT). Nowadays, every aspect of our life is connected to IT. Huge usage of IT is emerging in all over the world. Although, use of information technology is spreading its impact in every field of life, however, it impacts significantly in the field of education to make the learning process interesting as well as successfully. According to J. T. Fouts, the first use of the computer in 1970 into the education field. But, now computer and its technology almost use in every educational institution across the world. According to Sahin and Thompson, there is frequent use of the technology in the various fields such as research, marketing, business, banking, administration etc. but the frequency of IT use is not much in an education system. But, today, use of IT in an education system has been received more attention for improving the standard of learning as well as teaching. Various resources such as computer, internet, broadcasting technologies are being used to improve the education system. In earlier days, teachers were not much aware of the need of bringing IT as an essential part of their day to day activities. Moreover, it was impossible to do study in foreign universities without going over there. But, today's scenario is completely changed. IT makes it possible by using various technologies such as online education, distance education, Computer Aided Courses etc. in the field of education.

Role of Computer and Information Technology (IT) in Education

Computer and its technology has been performed various roles such as tutor, surrogate teacher etc. in different field of education. It change dramatically in the nature of way of teaching has been used in classrooms. Its technology has proved vary successful in education management applications like planning, date analysis. According to Y.Bo, computer technology should be used to reform the teaching methods and curriculum program. According to Li. Yumei, computer can be used in education by three different ways such as "As a teacher", "As a learner", and "As an assistant". Broadly, one can consider the following roles of education where computer has been effectively used as shown as following:

Application Areas of Computer in Education

- Computer Aided Learning
- Distance Learning
- Online Examination

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Distance Learning

Computer has become an important part of every walk of life such as on campus, at home and in office. Computer and related technologies have been used in distance learning through various ways such as Teleconferencing, video-conferencing, audio graphics, Teletext, video text, multimedia and hypermedia, ebooks, online database, online discussion, on-demand call in course etc. Virtual classrooms play an important role in distance learning. Students can raise their doubts and teachers can provide the solutions without going to one's place.

The following are the different benefits of using technology in distance learning:

- Cost effective

- Independent of time and place

- Quality education through results access from mass product of course material

- Simultaneously a lot of students can be benefitted

On-Line Examination and Monitoring

Online examination and monitoring system have completely changed due to the development of modern education technology. These systems ensure about the fairness and impartiality in the examination. Various researchers have been developing online examination system based on web. Today, various exams like GRE, GMAT, SAT, CCNA, MCSE and much more have been conducting computers in all over the world. There are following benefits of using the online examination and monitoring systems:

- Security

- Fairness and impartiality

- Save time and cost

Computer-Aided Learning

Today, computers have improved the quality of teaching and enhance the learning process with the help of various tools such as multimedia projector, PowerPoint presentations etc. Traditional methods of teaching can be monotonous, boring and students start getting frustrated. But information technology make learning process more interested through games, animated graphics etc. There are the following benefits of computer-aided learning:

- Interest and motivation

- Individualization

- Compatible learning style

- Optimal use of learning time

- Immediate feedback

- Error analysis

- Repetitive practice

- Pre-determined to process syllabus I

Supporting Technologies

There are a number of technology components available to built knowledge management systems. Local area networks, Internet and Intranets are the backbones. They provide transparent speedy transfer of knowledge among people and applications. Internet applications built using software and tools allow collaborative intelligent access to knowledge. Appropriate access and authentication layers ensure the security aspect of such systems. Data and document bases act as the repositories to generate the knowledge. Organization and managing explicit knowledge includes generation, creation or acquisition of knowledge. Such activities could be performed through tools such as RDBMS and EDMS. RDBMS and EDMS manage the explicit knowledge. They are accessed using various technologies such as Internet, Intranet, Search Engines and workflow tools.

Conclusion

Computer and its related technology have completely revolutionized our lives. Now, information technology is important in every walk in life. Undoubtedly, computer and information technology has great impact in our education system. Various technologies have been used to improve the teaching and

learning process. Information technology makes our education system interested and effective. Students can learn better without getting bored and frustrated. This paper presents the current scenario of information technology based education system

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