APPLICATION OF MODERN INFORMATION TECHNOLOGY IN EDUCATION PROCESSES

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ABSTRACT

Information technology in education needs a culture. This culture needs to be learned along with the use of hardware resources. The system needs to be educated to use information technology; otherwise, purchase and transfer of technology and investment will be nothing but wasting resources. Although these technologies are not impartial in any sense they should be used as means for communicating information, in the existing social structures. However since the process of change and transformation is in the nature of human social institutions, the educational system is also prone to some alterations. But the fundamental problem is that what strategies should be adopted so that education systems in developing countries do not only follow developed countries but grow and progress base on their own needs in the path of progress. In this paper, after explanation about the role of information technology and its place in education in underdeveloped countries and Uzbekistan, a discussion is presented on how to enter the field of information society and how to use information technologies.

Keywords: information technology, education, hardware resources, information society.

Introduction

Today knowledge and information are the main keys of obtaining the productivity, competition, wealth and comfort. So countries have concentrated on approaches for increasing the gaining of better-quality education. In order to develop the human capital, it is necessary to look at our schools and education and see if our education is progressing in step with the world that is changing and developing quickly. The problem is that if we compare the modern world with the last-century, we are confronted with dazzling developments of sciences, business, medical services, communications and many other fields. But visiting the schools, we, surprisingly, see no difference between the contemporary classrooms and the last-century ones; students sitting in rows, holding pencil and paper, noting down hurriedly what the teacher is saying and writing so that they know them by heart and give them back at the time of test quickly. This is while many matters have been changed through the sciences and technical development, but education and the students learning methods and the teachers. Teaching methods have remained unchanged. The international society for technology in educational (ISTE)* emphasizes that the teachers of today should prepare to provide technology-based

learning opportunities for the students. In fact, preparation for applying the technology and awareness of technology to enhance the quality of the students learning should be one of the teacher's basic skills. In most parts of the world, the most effective forward leap has been for applying IT (information Technology) in the higher education since 1990.

What is Information Technology?

Information technology is referred to the knowledge process and its applying methods, processing, transferring and making information in progress. IT includes gathering, organizing, storing, publishing and using the information in the form of sound , picture graphic, text, number, … by using the computer and telecommunication tolls…. Important changes resulting from IT, has became the source of basic changes in the classes. The most important changes have roots in this fact that technology has enabled students to accent the out-of-class information and this has caused the increase of their motivations for learning. One of the information systems roles in the education is ensuring that we can provide our necessary information when it is needed. We should thrive to predict the necessary information so that we can access it when needed. Some predictions suggest that IT ends in the developing of «global village», and the others believe that new information technologies will help international accord (mutual understanding), peace and brotherhood. The other ones consider the technology as a factor of strengthening the independence and promotion of democratic ideas. Others have considered the technology as a factor liberating the third world masses, so, in their view, getting the information through the greater communication systems as a purpose should be followed. But developing countries, besides hard access to the technology, are confronting with structural and behavioral problems related to it. Efficiency in these technologies depends on political, cultural, economical, technical factors and progression level of softwares and the quality of its being institutionalized and the use of it.

Importance and Role of IT in the Education

By considering that education has been using the technology for expanding and developing different processes of the educational system more than one century, it is not surprising that new technology arrival has raised the interest in obtaining knowledge by various methods of presenting knowledge. Today technology-base education is attainable at the universities of developed countries. Smart schools have made a leap in virtual learning. On-line learning and remote training are among new education forms in the new century. By evolving the learning environments at the beginning of 21st century, individuals and societies put heavy responsibility on the shoulder of educational institutions and their traditional structures by their increasing need of education Today various informational and communicational technologies have the ability of facilitating the education and learning process. Also there is an evidence stating that information technologies provide effective and inflexible methods for professionally developing teachers. Beauchomp & Parkinson, in a study under the title of «The students view of sciences during transferring from rich technology environment at the elementary course to the high school with low technology equipment» concluded that although the high school students were annoyed by insufficient access to computers and other

information technologies, they enjoyed the course by the efforts of sciences teachers. Most major properties of the education system in information and communication age are:

1-   In new education, what is worthy of knowing and what is necessary is stoned. Not the learning of all information.

2-   In new education, the teacher helps the student to obtain, select, evaluate and store the information by the use of vast scope of sources.

3-   Printed magazines and books are knowledge sources; The drafts determined for writing and publishing are replaced by online books and magazines.

4-   Some advantages of using technology and IT in the Education: students learn their lessons by using technical tools in less time. By the use of information technology and its tools especially computer and planning modern tutorial programs such as virtual tutorial program, possibility of expediting the process of information dissemination, various recognizable and repeatable learning sources, more flexible structure , information search and also possibility of metacognitive understanding have provided for students , and they can use this device as a tool for their educational activities so that this matter has raised the speed and quality of learning significantly. High flexibility in when and where students and teachers perform their duties Informational society; where economical, cultural and social life is dependent on information and communication technology.

Advantages of Informational society:

1. Enriching spare time

2. Enabling teleworking.

3. Providing new opportunities for raising national productivity and competitive atmosphere.

4. Increasing employment

5. Life-long education.

IT and the necessity of changing education

Advent of PC (personal computers) and extent access to the internet establishes an environment making global education systems obliged to change their education structure in major ways The duty of educational systems confronting the changes is clear. Its primary purpose should be increasing the human power against changes, i.e. someone can adapt to continuous change, observing economy, quickly. The more rapid change, the more attention should be paid to recognizing the pattern of future events. To help humans to remove future shock, we should establish a meta-industrial educational system. For this, instead of searching in the past, we should find our purposes and methods in the future. It is obvious that in 21st century the world will be dominated by modern technology and due to rapid scientific, economic, cultural and political changes, the educational systems will not be able to consider themselves as islands separated from the other social and national organization in the global village. Because the education, both in the view of historical empiricism and particular conditions encompassing 21st century, surely, will be the center of changes, evolutions and multiplications of 21st century. Certainly the society doesn't view IT only as an economic variable and political lever, but as a possibility for changing education through IT. So one can suppose proposed patterns

of IT in education as center on nature of knowledge, functional techniques and a controlling criterion in society.

Conclusion

In today's world education needs modern, moderate and simple technologies in order to meet its needs for its arrival and correct use. Education should perform policies, most important ones are:

1. Expanding human sources of IT through educational programs and promoting skills for increasing work force efficiency in education.

2. Using IT for increasing educational institution efficiency for better education accompanying creativity.

3. Supporting IT, for example supporting costs related to research and expansion in education

4. Establishing proper atmosphere and participation morale in education by the use of IT.

5. Establishing cooperation and coordination between various parts in the field of using the aforementioned tools.

6. Expanding the culture of using IT through providing and encouraging its consumption in education. In evaluating kinds of information technologies education should consider matters such as need, properties of scientific efficiency, economy and facilities and skill potentials existing in this case.

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