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Information Modern Technologies and Effective Learning of Learners

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Abstract

Information technology as a new technology has provided a lot of Contexts and position to learning and as an important means is used to facilitate learning to learn. The use of modern information technology has created based on technology to be great potential in education that is the very Affect utilizes them in the teaching - learning. The purpose of this paper is to examine the role of new information technologies and its effect on the learning. Findings of this study that has been compiled the library method has shown that in education based on IT is gone Space and time limits and there is training in everywhere at any time. Training to use this opportunity based on the ability of individual learning situation and better learning happens due to the activities, collaborating, self-inclusive and continuity between the academic subjects.

Key words: Modern technology, Information, Learning, Learners

Introduction:

In fact the twenty-first century world is the world of information modern technology hegemony. Educational systems will not be able to know in a society such as the island itself apart from other social institutions, national and international extensive interactions in the global village (aali, 2002). The issue of education quality and effectiveness of educational systems is the most important the concerns of educational systems and stakeholders and decision makers in the development of any country. ICT has the ability to within a program and changes in the structure and training methods to cut costs and increase the quality of the training products with the needs of their society-and-match and walk in the direction of practical training (Salehi Amiri and Heidarzadeh, 2007).

Information and communication technology is one of Factors of change in the classrooms and is irrefutable the role and its impact on the development of knowledge and to facilitate and accelerate learning in the present age (Soleymanpoor, 2010). The use of IT in education has many benefits and advantages that can be more effective and deeper to provide for a range of students. Also the innovation in teaching methods and the use of IT will be provided to develop students' cooperative learning, boosting the morale of searching, research, practical training, education and lifelong learning in schools.

Concepts and definitions:

Information:

Information is the all the data is shaped and altered so that they are meaningful and useful. Information with mixed human and is social phenomenon. Because the data transfer is dumped into humans. The division of labor among humans in order to meet the needs of communication between humans encourages the transfer of information between individuals. Something that can change its information system created mental recipients and reduce irregularities is information. The result of this change is the creation of knowledge and the ability to make decisions in human systems.

Learning:

Various changes have occurred due teaching and learning in human life. There is no doubt that the importance of learning in human growth is far beyond the vision of his ideas. Due to change the environment of human life, Man has to learn to overcome these changes. Learning is the process that change behaviors and beliefs of people and differently think and act and the exercise of which is to be observed changes in behavior and practice (Alvani, 2000).

In general, learning, transformative activity and prepares individuals to deal with environmental events. In fact, the learning experience is a series of process and products. In fact, the concept of learning is very wide that there is such forms as new attitudes, problem solving, and application of knowledge in reasoning, thinking. Various definitions have been learning. But many scholars believe that "learning by experience or training in behavior changes that occur in living creatures."

Learning is change that be created in learner behavior by teaching and various skills. This behavior may be visible in the short term or this behavior may be invisible in the short term. However, this change in behavior and learning throughout life are insight learners. As mentioned above, people have different needs for access to information and knowledge, engage and learn. So should be considered the differences in the needs and preferences and differences in learning and should not be expected that individuals alike,

something to learn, should pay attention to motivated learner to learning materials.Without a doubt, optimal learning is the ideal learning. There are a variety of tools and resources to implement optimal learning that their numbers will increase with the development of new technologies. It should be noted that the success of any society is dependent learners to be involved in the process of lifelong learning.

Information Technology (IT):

IT literal meaning, knowledge and technology to do things with the knowledge and scientific information. Technology is to Apply of human knowledge. Technology is systematically any technical knowledge or scientific theories that are based on experiences and increase community capacity to produce goods and services (Bourgoin, 1999). Skinner is one of the biggest supporters of teaching technology. He believes that teachers can be taught in such a way that the right technology to be used in a teaching position. In his view Technology teaching is to make the process of finding and learning conditions, using physical science and electrical and mechanical devices, so that these conditions can lead to efficiency and effectiveness in teaching.

IT is the technologies that person in recording, storing, processing, retrieving, transmitting and receiving data assist. This term includes new technologies such as computers, transmission via fax, and other means of communications. IT have transformed the way we work, economic and social affairs, and even changed the way we think. Today, IT compared with a much wider range of media and the possibilities for change and projections and provide new outlook to develop (Heidari, 2010).

Activities inclusive:

According to various IT activities should be considered for learners to achieve learning outcomes and meet the individual needs of learners. Samples of learning activities include reading textual content, audio content and listen to video or visual content. Students can do research on web pages and to learn more connected to the electronic library. Suitable functional exercises should be included in the electronic lesson connection be created between the content. Practical activities be considered with feedback on the lessons to learners have the opportunity on how to implement control actions.

Virtual education:

One of the teaching methods is in recent years with the development of IT and communication in formal and informal education and try to replace the traditional education, is learning. Virtual education Curve motto is: "must take away education unto people not take them unto education, with social view teaching and learning, network organization that emphasizes participation". Virtual education, is a metaphor for teaching and learning environments, focusing on inclusive (with different abilities and backgrounds-scientific and educational needs) in order to achieve situational learning, experiential learning and problem focused (as the heart of Virtual education) through a combination of information and communication technologies.

Theoretical basis of research:

Today, computer applications has a unique role in science education. IT can make science more interesting, more accurate and more appropriate the more opportunities to view, create discussion and

analysis, provide more opportunities for communication and cooperation, as a means of independence in research to give students scientific and educational content have a positive impact on teaching and learning. To use of IT can be used the Internet or CDs and DVDs as data sources to gather scientific information in learning. Digital photography and video cameras used to record events. To analyze the data can be used from spreadsheets and graphical tools. Animations and virtual environments, are good tools for simulation and modeling. Email, portable devices like laptops, tablets, phones with touch screen, the content technologies, such as projectors, interactive boards, are useful tools for teaching and learning.

The role of IT in learning

IT in a short time that it is going to be able to create enormous changes in the way human life. Learning is one of the concept that the major contribution of these changes is allocated. The role of IT is very important in the learning cycle. In learn to traditional, person had to read constantly and write and was virtually one-way communicate. But by applying IT in learning, the individual are also needs to have basic skills in using IT skills. Learning experiences based on new information technologies, by creating fundamental changes in the traditional teaching concepts, has been able to eliminate many of the inefficiencies of educational systems and created many changes in education. With the use of virtual worlds can be achieved in learning new and effective methods of learning. Due to the use of ICT in teaching, education is better and faster. Application of IT in Education, created a new type of learning, so that learning is not done only in person. There is no need that learning be face to face, and it is expected that non-class learning environment, it is possible, so that information can be easily shared with other learners. These developments led the teacher's role and the role of libraries is changing. In this way, a new type of learning was named e-learning.

E-Learning:

There are many different definitions of e-learning. However, the definition that is comprehensive and acceptable to all difficult. Sam Naidu (2006) knows e-learning using ICT in teaching and learning. Cross believes that many people know him as the inventor of the term e-learning, e-learning has six signs of the following:

1. E-learning can be done by Internet.
2. E-learning-based learning with a comprehensive effort by taking advantage of new technologies mean.
3. E-learning ability to perform management and administrative processes such as registration fees, oversee the implementation of student activities, teaching and provides remote monitoring and performance evaluation.
4. E-learning is learner-centered and to be attention demographic characteristics of learners.
5. E-learning is associated with the most recent information.
6. E-learning can be based on the set of training methods (such as virtual classrooms, digital collaboration, simulation, etc.). Form view of Garrison and Anderson (2003), e-learning refers to the kind of learning that internet and network environment and the official making takes place and a set of multimedia technologies are used to mean (According to Norozi, 2008).

E-learning as an educational new technology to one of the phenomena of the modern world that has emerged in the information age and knowledge-based society. The basic features of e-learning, interactive

communication and its properties. Now provides E-learning to our better method to process and make sense of the data and recreate them (Zarei, 2005).

Other traditional classes are not much effective, because it depends on the time and place for learning and can provide a proper context. Printed text are problematic also due to its own limitations (text, image and line design). Educational software provide a rich resource that can create opportunities for growth learners and collaborative environment that allows learners and teachers to search and examine a variety of issues. But educational software itself has little effect on learning and teaching. No doubt this technology will create numerous opportunities for learning environments and the interaction is significant training, but alone can increase the quality of teaching and learning. This means that the learning and teaching environment, the supply of content, learning activities, learning how to carry out the process of learner performance assessment and feedback process should be shaped to fit, otherwise there is no guarantee for achieving educational goals (Razavi, 2007).

The use of electronic educational materials and tools in teaching and learning:

The most important reason for using educational tools, learning with different senses role that research results have shown that the role of the different senses not created equal in learning. The following findings clearly show this difference:

75% learning is done through the use of "sense of vision".
13% learning is done through the use of "hearing".
6% learning is done through the use of "touch".
3% learning is done through the use of "Sense of smell ".
3% learning is done through the use of "taste".

Unfortunately, in many cases, teachers have emphasized the use of 13% hearing so that is spent listening students about 60% of the time in primary schools and 90% in secondary schools. While students have heard about a quarter can remember I should note that none of the media education alone are not able to provide a complete educational services. But they can help appropriate integration of teachers teaching and students learning.

The role of material and equipment include:

1) These materials and devices, based palpable concepts are to be made for thinking and creating.
2) Interested learner's coverage. .
3) Learn faster and be more stable.
4) Actual experiences and their objective is to provide learners.
5) Flows and events that due to slow movement and appearance, they are not allowed to study the details may be, such as video and display of flower opening, using single-frame shooting.

The advantages of IT in learning

Aristotle believed that learning is not an easy task. For every person is a way of learning that is better than other methods. Because learning is typically dependent on practical experience which means physical exercise and repeated it comes as a way of learning and is important in a society that is based on expanding knowledge to increase learning skills. (Shah mohamadi, 2010).

In the present age, modern IT are learning tools that have a lot of advantages and increase the quality of education.

1. IT allows each individual learning ability and talent gives him fits.
2. Learning is an active process. Keeping active learners and force them to do meaningful activities to foster high levels of information and facilitate the creation of personal meaning.
3. . Learners must construct knowledge, learning first-hand information without intermediaries in e-learning experience.
4. Participatory and collaborative learning are encouraged to facilitate learning. (Hooper and Hanafyn, 2007). Real experience working with other students in the group is awarded to learners and allow them to operate their metacognitive skills. Learners will be able to take advantage of the strengths and abilities of other students and learn from others. The membership learners to do the group should be based on the expertise and learning style of the group.
5. Surround put the world into a library and provides the possibility to use it.
6. The use of virtual education, the need for simultaneous presence of students in the correct space and reduce the cost of training courses, as follows. Using IT learners can acquire a lot of information in a short time.
   Research has shown that using computers in addition to increasing the motivation of educating boost morale, confidence and deal with issues in them. Using communication tools such as e-mail, fax and video conferencing shortens the time and distance as well as providing new facilities has been for learning.

Obstacles and difficulties in using IT

In the application of IT There are many obstacles to teaching-learning activities, including the following: cited:

1. Lack of proper infrastructure, IT and communications in all parts of the country.
2. The lack of computer equipment needed for different content.
3. The lack of knowledge of how to use the hardware.
4. The lack of appropriate e-learning content.
5. Not considering various ways of learning through software.
6. The absence of communication technology for the exchange of knowledge needed in training centers.

Background research:

Mohammad Rezai et al (2013), in order to explore the impact of IT and communication in the learning sciences and Farsi, to the conclusion that IT has had an impact on Persian enhance learning and science courses.

Integration of IT and communication in the educational system in addition to cultural considerations, economic, social, and technological and value, requires preparation and careful preparation, wisely, is conscious and all-round vision. Since the establishment of fan-tech information and communication in the educational system of the country, passing through the transfer of ideas, creation, capture and localization, distribution and documentation demands, access to resources of knowledge and international experience helps to facilitate this transition. Technology developments lead to variations in work, changes in the organization of work. (Shafii, 2013)

Niaz Azari (2012), in order to explore the impact of information and communication technology in learning geography and science courses as half of the pretest and posttest control group of elementary school students in Sari, to the conclusion that IT results in increased learning science and geography influence.

Afsheh(2011), in A study has shown that the application of technology in providing training to staff, which greatly affects their productivity and no matter how scientifically trained more specialization and more professional in terms of teaching methods and the technology is even more productive relationship.

Heidari et al (2010),in the study were examined to compare the effect of teaching the traditional way and using educational software on academic achievement in English, which includes reading and dictation sections and the total of their findings has shown that has been effective application of educational software and teaching to help the students learn the English language. In fact, the explanation of the contents of educational software, Review, Create and coordination between the content creator to help teachers and students learn more and better to help them to students richer, more effective, more interesting and more live also make findings indicate that the use of educational software enhances the students' learning motivation. As a result, by help of educational software and teaching the students learn the English language. So can say that educational software as new tools, the potential for changing significantly the quality of teaching and learning and teaching and learning use promoted in the educational system of fair.

Shah Mohammadi et al. (2010), showed that the impact of IT in various aspects of education. The most important role of research exploring the impact of technology on various performances of education. Thus, the formation of working groups composed of experts education and training of IT promote prosperity by using technology effectively provide detailed data.

The results Soleymanpoor search (2010), the effect of teaching methods based on IT and communication in creating sustainable learning experimental science confirms that the students who had seen Educational Communications and IT based approach towards to students who are learning traditional methods, better performance and higher scores in this final examination and tests, respectively. This implies favorable effects on learning and teaching using Information and Communication Technology recall, or in other words, learning is sustainable.

Research by the Deryakulu and colleagues (2010), as predicted successfully teach students with different learning styles of IT and mobile communications, took place in Turkey. The main objective of this study was to predict the progress and success of ICT by students with different learning styles. Statistical analysis indicated a positive relationship between academic achievement and teaching with IT and communications.

Research by the Osu et al (2010), the impact of computer-aided education in biology lessons on performance compared to the traditional method of final year students were conducted in Ghana, a quasi-experiments. Statistical analysis showed that the experimental group of people who have taken computer science concepts through better on average than the control group who had learned concepts to the traditional method.

Elliott (2010), in a study entitled multimedia in schools, the impact of using the Web animations with scientific learning, language, reading and comprehension in third and fifth and eighth grade students of high school. Results showed that the experimental group than average and better than the control group.

Barrow et al. (2009), in a study entitled Information and Communication Technology-based effectiveness

of training and courses in different levels are discussed the advantages of using computers in mathematics education. The results showed that the performance of students in the experimental group (trained in the computer lab) significantly better than the control group (trained in the traditional way), respectively.

Research by Harrison et al (2002), the impact of information and communication technology in training and turned out to be deeper and more effective teaching of IT and communication, and causes the creativity. In a study by Yang Ji (2002) (quoting Sharifi, 2007) in relation to the impact of IT on how to learn, communication was conducted, it was determined that Information and Communication Technology, increases learning for focusing on learning.

Organizations such as UNESCO has published various reports indicate that IT is creating fundamental changes in the learning process. Due to the diverse communities of people, their creativity and interests, there is a need for a variety of learning methods. This requires a new form of education that have enough flexibility in this area (Haddad and George, 2002) (quoted Norozi, 2008).

Results and findings:

According to a study conducted researches on the impact of the use of computer IT, the following results was achieved in the use of technology for teaching activities - learning.

1. Learning will be more effective because learning should be active and collaborative learning, or pass on the information obtained as a result of the discussion.
2. It is said that education should be based on individual learning, new information technologies makes it possible that any of the students according to their ability to learn to make better use of this possibility.
3. As mentioned earlier, IT is a set of procedures, rules and tools for identification, collection, storage, production and distribution, organization, reproduction of the information. As a result, learners are different ways to reach their goals.
4. In the electronic environment, students learn to place and receive data filtered by the educators who may have style, different from their experience and knowledge, your data immediacy for business and experience with them. As a result, they will have access to more information.
5. Use IT development programs learning done many different ways and at different levels.

Application results:

If applicable, using IT technology can be said to have various features, such as software, multimedia content is engaging text, audio, and animated images are merged, the underlying motivation, mobility, learning, experience and innovation. So its application in education is an undeniable necessity to advance the quality of teaching and learning a lot.

Conclusion and Recommendations:

As is clear that IT is one of the outstanding characteristics with the passage of time and spatial constraints can establish education everywhere and at any time. This makes them a powerful lever for change in the education process has become.

The facts show that the use of modern technology in the 21st century and will continue to have a profound impact on human communities, and certainly the teaching and learning will be exempted from

these changes. Research on education, expressed which is a major IT is used in the regular education system.

In the end, according to those entitled to learn the capabilities and benefits of the proposed IT and utilities to these phenomena in current and future society and will, in particular education and training of people need to know to-date and access to such technology to their efforts in order to achieve greater growth and learning, and creative learners and active and innovative delivery technology and information society that nations and governments will experience as the main language of communication. It should also benefit from the latest technologies for the benefit soaking executable programs and achieve better results.

According to the research findings suggestions for development of information and communication technologies in learning to:

1. The contribution of culture to the concept, necessity and manner of the application of IT in educational programs due to the impact on attitude change, consolidation and stability of content, reasoning, creativity and learning overall.
2. The development of knowledge and transformation in the attitude of educators towards the application of IT through holding educational courses of quality.
3. Culture and positive attitude in the field of design and application of educational technology by educators.
4. Creating institutions in the design, needs assessment, preparation and dissemination of information, processing and dissemination of IT.
5. Create fields in Curriculum and Instruction for the use of communication networks and electronic media.
6. Make the necessary changes in school curricula tailored to the needs and expectations of today's society.
7. Investment and planning for IT training centers.
8. Manpower training infrastructure improvement associated with IT.

References:

Aali, Shahin daughter, Information Technology in Education, Journal of doctrine, No. 15, 2002, 6-11.

Alvani, S M, New Horizons in Public Administration, Public Administration Quarterly, Issue 5, 2000.

Afsheh, Amir, Kianfar, F and Shaeidi, Ali, is the application of information technology in education and its impact on employee productivity Islamic Azad University, University of Electronic learning (Media), Issue 2011.1, 2- 29.

Barrow, L., Markman, L. & Rouse, C. E. (2009). Technology's edge: The educational benefits of computer-aided instruction. American Economic Journal: Economic Policy, 1(1), 52-74

Burgin, M. (1999). Technology in Education. 29th ASEE/IEEE Frontiers in education conference. November 10-13.

Deryakulu, D., Buyukozturk, S., Ozcinar, H. (2010). Predictors of academic achievement of student ICT teachers with different learning styles. International Journal of Human and Social Sciences, 5(9), 567- 573.

Elliot, S. (2010). Multimedia in Schools: A study of web-based animation effectiveness. Retrieved from http://center.uoregon.edu

Garrison DR, Anderson T. E-learning in the 21st century: a framework for research and practice. London: Routledge; 2003.

Harrison, C., Cavendish, S., Comber, C., Fisher, T., Harrison, A., Haw, K., et al. (2002). ImpaCT2: The impact of information and communication technologies on pupil learning and attainment. ICT in Schools Research and Evaluation, Series 7. Coventry: BECTA/London: DfES.

Hrgnhan, By.r and Olson, Matthew H., 2000, Introduction to the Theory of learning (translations Saif, Ali Akbar) Tehran: Doran Publications.

Haider, Ghulam Hussain, Modanloo, jasmine and Niazazari, Marzieh, compared the effect of teaching the English language with educational software and traditional practices on student achievement, Journal of Information and Communication Technology in Education, First year, first issue, Number 1, fall 2010, 103-123.

Mohammad Rezaei, breeze, Zainal, Ali, hyperactivity stamps, rare and dagger Khani, Zabihullah, the effect of information technology and communication in learning elementary school students in Urmia, the first national conference on innovation in computer engineering and information technology, Branch, Institute of Higher education aurora, 2013 http://www.civilica.com/Paper-CEIT01-CEIT01_168.html

Mokhtari, Amir, in 2009, reviews the basics of instructional design virtual environments, Information Technology, Islamic Azad University, Science and Research Branch Tehran.

Niaz Azari, K., Behnamfar, R & Andy, S., the effect of information technology and communication in learning elementary school students, article 3, 2, 3 period (s 7), Spring 2012, 31-43.

Norozi, M, Zandi, Frank and Mosee Madani, F., rating methods, use of information technology in the teaching-learning process in schools, Journal of Educational Innovations, No. 26, 2008, 16-17.

Razavi, Abbas, 2007, new topics in educational Technology, Ahwaz: Chamran University.

Salehi Amiri, R. and Heidarzadeh, goddess, the role of information and communication technologies in the educational system and cultural development, Strategic Research Institute, Bulletin No. 15, 2007, 88-117.

Shafii, Hamid Reza, K.M role of knowledge management in the development of information technology and communications, the first National Conference on Innovation in Computer Engineering and Information Technology, Branch, Institute of Higher Education aurora, 2013 http://www.civilica.com/Paper-CEIT01-CEIT01_170.html

Shah Mohammadi, G., M. Moghaddam, Joseph and grace, Ali, the role of information technology in improving teaching law enforcement, security management studies, 2010, 250-270.

Sharifi, A., approaches and strategies of communication and information technology in universities. Educational Administration Quarterly, Volume 1, Number 2007.1,

Owusu, K. A., Monney, K. A., Appiah, J. Y., & Wilmot, E. M. (2010). Effects of computer-assisted instruction on performance of senior high school biology students in Ghana. Computers and education, 55(2), 904-910.

Unesco. (2002). Open and Distance Learning: Trends, Policy and Sterategy ConsideraƟons. Paris, France: Unesco. Retrieved from http://unesdoc.unesco.org/images/0012/001284/128463e. Pdf

Zavaraki Zarei, Ismail, 2005, e-learning in the 21st century, Tehran: Science and Technology. Soleymanpoor, J.,Khalkhali, Ali and observance of salvation, Layla, The Effect of Information and Communication Technology-based sustainable learning. Lessons of the third, Journal of Information and Communication Technology in Education, First year, the second issue, winter 2010, 94-77.