J. Basic. Appl. Sci. Res., 2(10)9860-9867, 2012
© 2012, TextRoad Publication

ISSN 2090-4304
Journal of Basic and Applied Scientific Research
www.textroad.com

A Survey of the Relationship between the Degrees of Using Information Technology and the Instructional Success of the High School Students Form Teachers' Viewpoint in Pars Abad Township in 2010-2011 Academic Year

Sadraddin Sattari [1,*], Mahdiyeh SeyyedMogaddasi [2], Zahra Ghaleb [2], Reza Dastoori [3], Leila Ayyari [4]

[1]Department of Educational Science, Ardabil branch, Islamic Azad University, Ardabil, Iran
[2]Department of Educational Science, Marand branch, Islamic Azad University, Marand, Iran
[3]Department of Educational Administration, Tabriz branch, Islamic Azad University, Tabriz, Iran
[4]Department of Educational Science, Tabriz branch, Islamic Azad University, Tabriz, Iran

ABSTRACT

This research has been conducted with the purpose of determining the relationship between the degree of using information technology and the instructional success of the high school students from teachers' viewpoint. We adopted the descriptive approach of the correlation type for the study, and the purpose of the research was functional. The statistic population of the research included all the high school teachers of Pars Abad Township (being 478 in number) among whom 215 were chosen as the sample by means of random sampling approach. We also employed a researcher-made questionnaire for the data collection. The validity of the means employed in the study was achieved through comments of the experts, and the reliability of the means reached 86% via Alpha Cronbach approach. The collected data were analyzed by means of Pearson Correlation Coefficient. The results indicated that there was a meaningful relationship between the degree of using information technology and the features of instructional success (critical thinking of the students, creativity, personal discipline observance, having tendency to classroom attendance, encouraging students to use auxiliary electronic tools, doing optimal homework by the students) from teachers' point of view. The results of the study could be employed for propagating the culture of using information technology for instructional purposes.

KEYWORDS: Information Technology, Instructional Success, Teachers of Pars Abad Township.

1. INTRODUCTION

The present age is the age of information which doubles, multiplies, and breaks out across the world on a short while. Reception of human life under such a phenomenon enables us to claim that the world has entered a society of information. Most of the researchers consider the information society as multi-structural and multi-dimensional, the society whose stratifications and levels are in need of information. In such a society accessibility or non-accessibility to information plays a vital, determinant role in all fields (Bahrampour, 2005, p: 2).

Nowadays using information and communication technology is an undeniable fact in instructional process, and the educational system has not withheld any possibility for better and optimal exploitation of the facilities; however, the problem is that many teachers do not yet consider the attitude of using such effective and helpful technology as necessary for instruction, and they are not even adequately familiar with the way it works (Tavakkoli, 2002).

Until recently education enjoyed teachers and trainers as the only instructional elements, and books were considered as the only main source of information, but today education is facing modern communication means, approaches, and environments. Influence of modern information technology into educational centers has totally changed the basic teacher-learner relationship as Eriek Ashbin raises the use of electronic media as a revolution in education, as Castles maintains that the concept of learning has changed in the age in which information is exposed to students in all times and places. In such an age students should be taught how to think (Castles, 2002, p: 10).

Nowadays the roles and functions of educational systems and their elements such as teachers, programs, contents of lessons, etc. are changing. The issue is having a school without walls. Information and communication technology has brought new ideas with it into classrooms such that computers and the Internet play a vital role in education. They are so much effectual in learning as well as in preparing the students for a universal society and economy. Most of the key challenges still exist in facing digital instructional rift as in the lack of teachers well-trained how to use the Internet and computer as well as their relations with instructional programs and the lack of technological infra-structures (Azad, 2004).

In the age of knowledge and globalization the outputs and functions of educational systems are especially emphasized; hence, all of us need to modify our attitudes toward educational systems. In order to make a change in the structure of functions and improve the quality of school education, we should stress on the extension of information and communication technology before everything and find out the new position of information technology in educational systems so that we do not fall behind in the process of handling the crisis (Tofler, 2002; Kharazmi translation, p: 34).

***Corresponding Author:** Sadraddin Sattari, Department of Educational Science, Ardabil branch, Islamic Azad University, Ardabil, Iran, Email: sadraddin1356@yahoo.com

Educational systems should highlight the use of information and communication technology in order to play their roles in the due form. Teaching students how to use technology should start from their childhood due to the importance of technology and appropriate acculturation of using it (Seif, 2008).

At the present age education requires communication, behavior change, and means technologies. However, there is still a long way to cover from the present technologies such as computer to their exploitation in the teaching learning process despite all the progresses that have been achieved in information and communication technology over the past decades (RaeesDana, 2006, p: 54).

The present age is the age of information. Owing to the new technologies, what seems to be of importance is that the educational system of a country is to create a dynamic, up-to-date teaching learning environment for each individual.

Now that there is a tendency towards a dynamic, active, up-to-date, and accessible system of education, we can proceed to prepare the society for a better future by means of information and communication technology in all fields as in education. Information and communication technology, with its various forms, contributes to the learning process and the instructional success of the students. The use of information and communication technology, especially computer, should be fixated in the society since schools and universities require a high level of instruction which could be created in the minds of learners under the auspices of information and communication technology (Jariani, 2003, p: 46).

The results of an Islamic research (2003) under the title of "An Analysis of the Internet Instructional Potentials and its Accessibility to High School Students and Teachers in Tehran" showed that the Internet has considerably intertwined with formal education and has been used in the form of online classes, plans, individual and collective projects, and joint plans among schools in various forms.

Degree of accessibility of high school students and teachers to the Internet in Tehran is too low, and instructional use of the Internet in high schools is consequently low. Accessibility of the students and teachers to the Internet often occurs at homes. Most of the students use the Internet for communication as well as analysis of scientific information, and most of the teachers use the Internet for exchanging information and emails.

Rezaeeyan (2004) has conducted a study under the title of "An Analysis of the Effect of Computer-Assisted Instruction on Grade 1 Guidance School Boy Students' Learning Geography Course in District 8 Tehran". From a statistical analysis of such research we can infer that students who were taught through computer-assisted instruction did better than the other group in learning. Other assumptions that were based on the effectiveness of computer-assisted instruction in the areas of comprehension, function, and analysis of materials were verified, but computer did not make a significant difference in information level in comparison to the traditional approach. The results of the Khaleghi's research (2005) under the title of "An Analysis of the Degree of the Effect of the IT in Acceleration and Stability of the Learning Process of Zanjan Township Teacher College Students" proved that IT-based instruction caused acceleration in students' learning more than non-IT-based instruction. From the instructional standpoint, it showed that using IT in instruction caused stability in learning.

The results of research conducted by Shobeiri and Attaran (2007) under the title of "Using Auxiliary Software in Grade 3 High School Physics Course and the Analysis of its Effect on Curricular Progress and Students' Interaction in Class" proved that using computer makes students to improve their learning process, increase their interaction with one another, and extend their moods to perform group tasks.

The results of the research carried out by Zarezadeh and Kadivar (2007) under the title of "A Comparison of Self-efficiency and Creativity in Students Who Use the Internet and Students Who Do not Use the Internet" proved that initiatively, creativity, as well as self-confidence and sense of humor of the students who use the Internet is by far higher than that of the students who do not use the Internet. Internet users are able to solve the problems in numerous ways and generate new thoughts.

Zanghaneh (2007) carried out a study under the title of "The Effect of Using Information and Communication Technology on Cherishing Creative Thought of Tehran Grade 3 High School Boy Students". Findings of the research showed the effectuality of using information and communication technology in education on the creativity in the general sense and initiatively in the specific sense of the students". Yet the rest of the assumptions of the research that had some relationship with other elements of creativity as in flexibility were not verified. Generally speaking, the result of the research proved that using information and communication technology for instructional purposes gave the good tidings of flourishing creativity especially in its initiative element.

The results of the study conducted by Mortazavi (2009) under the title of "Analysis of the Effect of Some Family, Social, and Educational Factors on using information and communication technology by the students from Tehran High School Teachers' Viewpoints". Schools should use information and communication technology in order to add a new horizon to the learning process and develop the relationship between school and home. Using information and communication technology can lead to benefits such as high motivation, self-confidence, better questioning, improving workforce with high potentials, better social and communication skills, improving independent learning, etc. in learning.

JafariGoloucheh (2011) carried out a study under the title of "A Comparison of the Effect of Software-Assisted English Teaching with the Traditional Method on the Learning Progress of Sari Township Guidance School Boy Students". The results showed that using instructional software to teach English is effective on not only the students'

curricular progress but also plays more effective role than the traditional methods in their learning. Likewise, teaching English via using instructional software turned out to be effective on the students' motives for learning.

King (1994-1995) conducted a study under the title of "Class 7 Students' Attitude towards Computer and School in Australia". In this study he used computer stress questionnaire including 26 positive phrases with Lickert scale and students' comprehension questionnaire about the quality of the curricula. He concluded that using computer developed positive attitudes towards computer and school in students.

Hopson (1998) investigated the nexus between the class environments enriched with technology high level thinking skills development and students' attitudes towards computer. The results of the research were; learning environments enriched with information and communication technology increase high level thinking skills development. Also, technology means help students shift from merely theoretical learning to the application of that learning, acquaintance with technology resources changes the role of the teachers as lecturers to facilitators of learning process, and the last result, learning environments enriched with technology have a positive, meaningful effect on the students' attitudes towards motivation, creativity, and importance of computer.

MortazaviNassiri (2000) has studied the effect of using computer and solving problems on the curricular success of the students in chemistry course and its processing skills, and the students' attitudes towards high school chemistry course. In this study 3 groups including a group equipped with computer software, a group taking the problem-solving attitude, and a group taking the traditional methods of learning the course were compared and contrasted.

His findings indicated the significant success of the group equipped with computer software and of the group taking the problem-solving attitude in information processing skills in comparison with the group taking the traditional methods. As for the students' attitudes towards the chemistry course the group taught by computer software had the highest points, and the group taught by traditional methods had the lowest points.

Almahboub (2000) studied the relationship between students' attitude towards school and computer, motivation, and study habits and concluded that:

- Girls have more positive tendency towards computer than boys,
- There exists a meaningful correlation between tendency to computer and school, motivation and study habits,
- Those students who had access to home computers had more positive attitude towards computer.

Sringam (2001) in his study under the title of "Improving Adult Students' Learning Outputs through Assimilation of IT in Distant Instruction in Thailand" achieved the following results:

- Computer-assisted discussions can supersede the face-to-face discussions without doing any harm to the students' learning outputs,
- Students develop their critical thinking skills through the assimilation of IT in teaching learning process,
- Using technology leaves no negative effect on the students' learning,
- Accepting the assimilation of IT in teaching learning process does no harm to students' curricular performance and improves critical thinking skills in minor groups.

In a different study carried out by Almekhlafi (2006) under the title of "The Effect of Computer-Assisted Language Learning on the Success and Motivation of the Primary School Students in Learning English as a Foreign Language in UAE", 83 students were put into two test group and control group, the study in which the control group received non-computer-assisted English teaching and the test group received a computer-assisted English teaching. The results demonstrated that there was a significant difference between the two groups' learning quality, with the better performance of the test group; furthermore, the results indicated that the test group showed motive for learning English more than the control group.

According to what we discussed above it can be concluded that expanding the use of information and communication technology should receive a special attention in the educational system of our own country; therefore, a crucial question prompts to be answered in this study, and that is: Is there a relationship between the degree of using information technology and instructional success of the students from the teachers' point of view?

2. RESEARCH METHODOLOGY

As the present study tries to discover the relationship between the degree of using information technology and the students' instructional success from Pars Abad Township high school teachers' standpoint. With regards to the large stretch of the statistical population and data collection we adopted the descriptive approach of the correlation type. Since some of the variables such as critical thinking, individual discipline observance by the students, degree of tendency to class attendance, encouraging students to use electronic auxiliary materials in their learning, creativity of the students, and doing successful optimal homework by the students have been analyzed, the purpose of this study is functional.

For data collection and their analysis we used a researcher-made questionnaire, and the statistical population involved all the 478 Pars Abad high school teachers 215 of whom were selected as the statistical sample based on a random sampling.

In this study we took both fieldwork and library approach for the data collection such that the theoretical basis of the issue was provided from the library; then we employed a researcher-made questionnaire for the collection of the data needed. The researcher collected and then analyzed the data needed through making presence in the specified schools and offering the questionnaires to the students to fill out. In order to provide such a means a questionnaire

including 30 questions, which was based on Lickert classification scale in 5 levels, was prepared after a prior investigation of the issue, comments of the experts in the field, and modifications of supervisors and advisors.

Before data collection, we should know the validity of the questionnaire, i. e., how exactly do the measurement means test the expected feature. To confirm the validity of the questionnaire we used comments of the experts in the field. The questionnaire was put into effect after verification. The reliability of the questionnaire was calculated through Cronbach Alpha Test. The degree of Cronbach Alpha of the whole questionnaire equals a=0/869 which indicates that the reliability of the measurement means is high.

3. RESULTS

Main Hypothesis of the Research

There is a relationship between the degree of using information technology and instructional success of the students from the teachers' viewpoint.

Pearson Correlation Coefficient Test has been used to test the main hypothesis of this study. The results of the r-Pearson test show that the calculated meaningful level (sig=0.000) is lower than the research alpha (0.05); thus, it could be said that there is a direct, meaningful relationship between the degree of using information technology and the instructional success of the students from the teachers' point of view. Table 1 depicts the results of the hypothesis testing mentioned above.

Table 1: Pearson Correlation Coefficient Test between the information technology variable and the instructional success variable

Information Technology		**Independent Variable**
		Dependent Variable
r=0.42 sig =0.000 N=215	Correlation Coefficient Meaningful Level Number of Witnesses	Instructional Success

Subsidiary Hypotheses of the Research

Hypothesis 1; There is a relationship between the degree of using technology and critical thinking of the students.

Pearson Correlation Coefficient Test was used to test this hypothesis, and the results of the r-Pearson Test (r=0.26) indicate that the calculated meaningful level (sig=0.000) is lower than the research alpha (0.05); thus, it could be concluded that there is a direct, meaningful relationship between the degree of using technology and critical thinking of the students. The following table depicts the data analysis related to this hypothesis.

Table 2: Pearson Correlation Coefficient Test between the information technology variable and critical thinking

Information Technology		Independent Variable
		Dependent Variable
r=0.26 sig =0.000 N=215	Correlation Coefficient Meaningful Level Number of Witnesses	Critical Thinking

Hypothesis 2; There is a relationship between the degree of using information technology and individual discipline observance by the students.

Pearson Correlation Coefficient Test was used to test this hypothesis. The results of r-Pearson Test (r=0.38) show that the calculated meaningful level (sig=0.000) was lower than the research alpha (0.05); thus, it could be concluded that there is a direct, meaningful relationship between the degree of using information technology and the individual discipline observance by the students from the teachers' point of view. Table 3 shows the results of the hypothesis testing mentioned above.

Table 3: Pearson Correlation Coefficient Test between the information technology variable and the individual discipline observance

Information Technology		**Independent Variable**
		Dependent Variable
r=0.38 sig =0.003 N=215	Correlation Coefficient Meaningful Level Number of Witnesses	Individual Discipline Observance

Hypothesis 3; there is a relationship between the degree of using information technology and the degree of tendency towards class attendance.

Pearson Correlation Coefficient Test was used to test this hypothesis. The results of r-Pearson Test (r=0.28) indicate that the calculated meaningful level (sig=0.000) is lower than the research alpha (0.05); therefore, we can conclude that there is a direct, meaningful relationship between the degree of using information technology and the

students' tendency towards class attendance from the teachers' viewpoint. Table 4 illustrates the results of the hypothesis testing mentioned above.

Table 4: Pearson Correlation Coefficient Test between the information technology variable and class attendance variable

Information Technology		Independent Variable Dependent Variable
r =0.28 sig =0.000 N=215	Correlation Coefficient Meaningful Level Number of Witnesses	Tendency to Class Attendance

Hypothesis 4; there is a relationship between the degree of using information technology and encouraging the students to use electronic auxiliary materials.

Pearson Correlation Coefficient Test was employed to test this hypothesis. The results of r-Pearson Test (r=0.32) prove that the calculated meaningful level (sig=0.000) is lower than the research alpha (0.05), so we conclude that there is a direct, meaningful relationship between the degree of using information technology and encouraging students to use electronic auxiliary materials from the teachers' point of view. Table 5 delineates the results of the hypothesis testing mentioned above.

Table 5: Pearson Correlation Coefficient Test between information technology variable and encouraging students to use electronic auxiliary materials

Information Technology		Independent Variable Dependent Variable
r =0.32 sig =0.000 N=215	Correlation Coefficient Meaningful Level Number of Witnesses	Encouraging Students

Hypothesis 5; there is a relationship between the degree of using information technology and the degree of students' creativity.

Pearson Correlation Coefficient Test was used to test this hypothesis. The results of the r-Pearson Test (r=0.19) show that the calculated meaningful level (sig=0.000) is lower than the research alpha (0.05), so it concludes that there is a direct, meaningful relationship between the degree of using information technology and the students' creativity from the teachers' point of view. Table 6 depicts the results of the hypothesis testing mentioned above.

Table 6: Pearson Correlation Coefficient Test between information technology variable and students' creativity

Information Technology		Independent Variable Dependent Variable
r =0.19 sig =0.000 N=215	Correlation Coefficient Meaningful Level Number of Witnesses	Students' Creativity

Hypothesis 6; there is a relationship between the degree of using information technology and doing optimal homework by the students.

Pearson Correlation Coefficient Test was employed to test this hypothesis. The results of the r-Pearson Test (r=0.52) show that the calculated meaningful level (sig=0.000) is lower than the research alpha (0.05); thus, we can conclude that there is a direct, meaningful relationship between the degree of using information technology and doing optimal homework by the students. Table 7 illustrates the results of the hypothesis testing mentioned above.

Table 7: Pearson Correlation Coefficient Test between information technology variable and doing optimal homework by the students

Information Technology		Independent Variable Dependent Variable
r =0/52 sig =0/000 N=215	Correlation Coefficient Meaningful Level Number of Witnesses	Doing Optimal Homework

4. Conclusions

Today there is a query common to all human societies, and that is: what role is technology supposed to play in human activities? The responses of a few commentators are as follows;

Technology is a way of building close rapports between real, internal conditions and environments and man-made, external conditions and environments. Technology should be at the service of education, not its captain (KarenjiBoard, related as Abedi, 2006).

Right now, classrooms are engulfed in the cultural norms and acts most of which have been stable over decades. The use of information technology does not necessarily change the norms and acts unless the teacher or other instructional factors confirm new habits and trends. Nafissi (2004) in response to the question, what potentials does the information technology carry that might be of use for education?, stated the facilitation of public accessibility to learning opportunities with high quality and appropriate cost and removal of the limits such as time, place, duration, and the distance between the learner and learning resources as in teacher. With the help of information and communication technology, presentation of a costless, fast, desirable, needs-oriented, comprehensive education during individuals' lifetimes would be provided. The results of this study demonstrate that there is a direct, meaningful relationship between the degree of using information technology and the students' instructional success form the teachers' point of view, i. e., increase or decrease in the degree of using information technology has a determinant, significant effect on the degree if instructional success of the students from the teachers' viewpoint.

The results of the hypothesis 1 show that there is a direct, meaningful relationship between the degree of using information technology and critical thinking of the students from the teachers' point of view, i. e., increase or decrease in the degree of using information technology has a determinant, significant effect on the degree of critical thinking of the students from the teachers' standpoint. The results obtained by this study in this area are in line with the results of the studies conducted by HadjiBozorghi (2008), Clark (2000), Scoffield (1995), Stoviller (2000), Sringam (2001), Almekhlafi (2006), namely, a teacher can adjust his/her syllabus with the new needs of human thought with the help of information technology, cherish critical thinking skills, and teach group work activities in order to prepare the students to face the information society.

The results of the hypothesis 2 prove that there is a direct, meaningful relationship between the degree of using information technology and individual discipline observance by the students from the teachers' point of view, i. e., increase or decrease in the degree of using information technology has a determinant, significant effect on the degree of individual discipline observance by the students from the teachers' viewpoint. The results obtained by this study in this area are in line with the results of the studies conducted by Zarezadeh and Kadivar (2007), Zanghaneh (2007), Mehrmohammadi (2008), Mortazavi (2009), Almahboub (2000), and Clark (2000).

The results of the hypothesis 3 show that there is a direct, significant relationship between the degree of using information technology and students' tendency towards class attendance from the teachers' point of view, i. e., increase or decrease in the degree of information technology has a determinant, significant effect on the degree of students' tendency towards class attendance from the teachers' standpoint.

The results obtained by this study in this area are in line with the results of the studies carried out by Alemi (2000), Fatemi (2005), Sakhtemanian (1996), Almahboub (2000), Chan Kunj (2002), and Almekhlafi (2006) such that using technology can provoke students' learning motivations as well as their curiosity to obtain information. The results of the studies conducted by Fazelian (2001), Bialuvisiuin Kachala (1996), James Kulick (1994), Hopson (2011), and Kondraso (2001) that students show more tendencies towards class attendance as long as they can use computers for learning purposes verify the results obtained via this study.

The results of hypothesis 4 prove that there is a direct, meaningful relationship between the degree of using information technology and encouraging students to use electronic auxiliary materials from the teachers' viewpoint, i. e., increase or decrease in the degree of using information technology has a determinant, significant effect on the degree of encouraging students to use electronic auxiliary materials from the teachers' viewpoint. The results obtained by this study in this area are in line with the results of the studies conducted by Dehghan (2008), Zanghaneh (2007), Shobeiri and Attaran (2007), Mortazavi (2009), Jafari Goloucheh (2011), Kanzak and Christine and Miashita (1998), Stoviller (2000), and Chan Kunj (2002).

The results of hypothesis 5 show that there is a direct, meaningful relationship between the degree of using information technology and students' creativity from the teachers' point of view, i. e., increase or decrease in the degree of using information technology has a determinant, significant effect on the degree of the students' creativity from the teachers' viewpoint. The results obtained by this study in this area are in line with the results of the studies carried out by Zarezadeh and Kadivar (2007), Zanghaneh (2007), Mehrmohammadi (2008), Mortazavi (2009), Jafari Goloucheh (20011), Almahboub (2000), Kondraso (2001), and Elkatine (2001) which demonstrate that the creativity, self-confidence, and sense of humor of the students who use the Internet is higher than those of the students who do not use it. Creating an opportunity for the students to use information and communication technology further motivates the students to learn.

The results of the hypothesis 6 prove that there is a direct, meaningful relationship between the degree of using information technology and doing optimal homework by the students, i. e., increase or decrease in the degree of using information technology has a determinant, significant effect on the degree of doing optimal homework by the students. The results obtained by this study in this area are in line with the results of the studies conducted by Saadatmand (2004), Dehghan (2006), Zanghaneh (2007), Shobeiri and Attaran (2007), Mortazavi (2009), Jafari Goloucheh (1389), Kanzak and christine and Miashita (2010), Hopson (2010), Stoviller (2000), Chan Kunj (2002). Under the auspices of information and communication technology presentation of a costless, fast, desirable, needs-oriented, and comprehensive instruction during individuals' lifetimes with doing optimal homework by the students will be provided.

The results obtained from the main hypothesis test demonstrate that there is a direct, meaningful relationship between the degree of using information technology and the students' instructional success from the teachers' viewpoint, i. e., increase or decrease in the degree of information technology has a determinant, significant effect on the degree of students' instructional success. The results obtained by this study are in line with the results of the studies conducted by Rezaeeyan (2004), Khaleghi (2005), Shobeiri and Attaran (2007), Zarezadeh and Kadivar (2007), Zanghaneh (2007), Mortazavi (2009), JafariGoloucheh (1389), MortazaviNassiri (2000), Almahboub (2000), Sringam (2001), and Almekhlafi (2006) which mean facilitation of accessibility to a costless and high-quality learning, removal of all limits of learning as in time, place, duration, and the distance between the learner and learning resource such as teacher. Under the auspices of information and communication technology presentation of a costless, fast, desirable, needs-oriented, and learner-centered instruction during individuals' lifetimes would be provided.

SobhiGaramaleki (2001) states one of the most important characteristics of the computer-based environments, students' better interaction with the instructional materials, and learning environments such that communication in interactive learning systems occur in a way that involves the learner in the selection of learning materials, answering the questions, or solving the problems. In this way the learner gets engaged in the learning process which leads to an effective learning, better comprehension, and extension of sensitivity to outside settings, and developing personality characteristics and self-confidence.

5. Suggestions for Educational Authorities and Curriculum Developers

- We suggest that contexts of using information technology be created in schools, an act which creates new social contexts for the students to learn.
- We suggest that contexts for familiarization with information technology be created for the teachers so that they can readily convey their knowledge to the students.
- We suggest that adequate equipment such as syllabus-oriented CDs and instructive video films be provided for the teachers.
- We suggest that educational authorities and curriculum developers devise to teach critical thinking skills to the students to use new technology and to teach them group work procedures for preparing them to face the information society.
- We suggest that educational authorities and curriculum developers create opportunities of using information and communication technology in order to motivate the students to learn.
- We suggest that educational authorities and curriculum developers prioritize the use of instructive software due to the effect of using information technology in curricular progress of the students, their personal tendency towards class attendance, improving their interactions with each other, and encouraging them to do group work activities.

REFERENCES

Abedi, E., 2005. Analysis of Hurand High School Teachers Viewpoint Concerning the Effect of Unarticulated Educational Curricula on Their Teaching. Educational Research Center, Provincial Organization of Education.

Almahboub, S. F., 2000. Attitudes towards computer use and gender differences among Kuwaiti sixth- grade students. Unpublished Dissertation, university of nor th Texas, united states of America.

Almekhlafi, A., 2006. The effect of Computer-Assisted Language Learning (CALL) on United arab Emirates EFL school students, achievement and attitude. Journal of Interactive learning Research, 17(2), 121- 142.

Assadollah, A., 2003. *Productivity in Information*. Information Quarterly. Cycle: 17. No. 1 & 2 spring & summer.

Bahrampour, S., 2004. Social Coherence in Information Society: A View to Iran's Position. A seminar in Iran and Information Society. Tehran: Second Seminar.

Castles, M., 2001. Age of Information, Economy of Society, Culture. (Alikhan, Pakbaz, and Chavoshian Translation). Tehran, Tarh-e- now.

Eslami, M., 2002. Analysis of the Internet Instructional Potentials and Degree of High School Teachers' and Students' Accessibility to it in Tehran. An Unpublished MA Dissertation in the Islamic Azad University of Tehran Olum- Tahghigat.

Hopson, M. H., 1998. Effects of technology – enriched learning environment on student development of higher order thinking skills. Unpublished Doctoral Dissertation, university of North Texas, United States of America.

JafariGoloucheh, A., 2010. A Comparison of the Effect of Software-Assisted English Teaching with the Traditional Method on the Learning Progress of Sari Township Guidance School Boy Students. An Unpublished MA Dissertation in Educational Technology in the Islamic Azad University of Sari.

Jariani, A., 2002. Bells go off for the Information and Communication Technology. Maal Development Journal. Year 21, No. 6.

Khaleghi, Z., 2004. An Analysis of the Degree of the Effect of the IT in Acceleration and Stability of the Learning Process of Zanjan Township Teacher College Students. An MA Dissertation in Allameh Tabatabai University.

King, J. A., 1994-1995. Fear or frustration? Student's attitudes toward computers and school. journal of Research on computing in Education , 27(2),154-170

Mortazavi, A., 2008. Analysis of the Effect of Some Family, Social, and Educational Factors on using information and communication technology by the students from Tehran High School Teachers' Viewpoints. An Unpublished MA Dissertation, Tehran University.

MortazaviNassiri. S. H., 2000. Computer Application in teaching physics and its effect on general and scientific creativity in relation to intelligence, S. E. S. and attitude towards media. A thesis submitted to the university panjab.

Nafissi, A., 2003. Wishes, Missions, and General Aims of Information Technology Strategies in Education. A Draft Ratified by the Leader's Council's Information Technology in Education. Tehran, Education Research Center.

RaeesDana, F., 2005. Educational Technology. Educational Technology Journal, No. 2.

Rezaeeyan, F., 2003. An Analysis of the Effect of Computer-Assisted Instruction on Grade 1 Guidance School Boy Students' Learning Geography Course in District 8 Tehran. An Unpublished MA Dissertation, Tehran University of Teacher Education.

Seif, A. A., 2007. Measurement Methods and Instruction Methods. Tehran, Aagah Publications, Tenth Edition.

Shobeiri, A. Attaran, M., 2006. Using Auxiliary Software in Grade 3 High School Physics Course and the Analysis of its Effect on Curricular Progress and Students' Interaction in Class. An Unpublished MA Dissertation, Tehran University of Teacher Education.

SobhiGaramaleki, N., 2000. Creativity and its Methods in Children. Educational Technology Monthly. March 1999.

Sringam, C., Barnes, A., Yates, G. C., 2001. Investigating distance adult students learning outcomes through the integration of computer conferencing into distance education practices in Thailand. paper presented at the open and Distance learning Association of Australia 15 th Biennial forum , Sydney , 24 th-27 th September.

Toffler, E., 2001. Third Wave. (ShahinDokht Kharazmi Translation). Tehran: Faakhteh Publications. Third Edition.

Tavakkoli, M., 2001. The Reasons of Unused of Educational Technology. A Dissertation in Educational Technology in Islamic Azad University of Toyserkan.

Zarezadeh, M., Kadivar, P., 2006. A Comparison of Self-efficiency and Creativity in Students Who Use the Internet and Students Who Do not Use the Internet. Tehran, Council of Teachers & Parents.

Zanghaneh, H., 2006. The Effect of Using Information and Communication Technology on Cherishing Creative Thought of Tehran Grade 3 High School Boy Students. An Unpublished MA Dissertation, Allameh Tabatabai University.