

## Attitudes of Students toward Computers

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### Abstract

With the developments of Information High Technology, all applications of the instruction start to have tendency towards technology based instruction instead of directed, teacher-centered instruction. It is important to mention that computers are the main instructional support to the learning and teaching process. As a human being, there is an adaptation process of the new developments and implications as well. Therefore; the research based study handled the attitudes of students towards computers and its new trends. By the way; attitudes towards teacher-centered instruction versus student centered instruction and tendency towards the place of technology in learning and teaching process can be determined with the reflections of the statistical surveys. Required research reflected the consciousness about the use of computer in every day of life and educational cycle as well. It is important to mention that computers require more alternatives and advantages to students and their educational studies. Computers provide fast, easy research and analysis for the students studying field. As a technological tool, it provides the equal standards, opportunities and easy path for the successful understanding and also meaningful learning for students. In order to be reflective, recommend on the usage of computers and facilities, there should be examination of the thoughts, attitudes of students towards computer.

### Introduction

Technology is the main support for the students learning developments nowadays. With shifting from the teacher-centered instruction to child-centered instruction, the role, activities, attitudes, reflections of the students become more important concern to overlook the effectiveness of technology in instruction. Computers are the main technology support as a tool for effective learning and teaching process. Computer based instruction and computers programs, tools as itself provides much facilities and supports to students' educational life. Computers are update mechanism for the education and it is not only for education, these developments affect all global, cultural, economical life standards as well.

The computer as productivity tool has great role in education. Computers include hardware and software, word processing functions, graphics, programmed instruction for problem solving, spreadsheets, databases, networking and telecommunications for today high technology developments as a reflective to education. In addition to this, within the constructivist approach perspective, computers help the differentiate roles of students and teachers, application of instruction by providing equal standards, understanding, meaningful learning for all students. Computer help to convert teacher based instruction to child centered instruction with providing multiple intelligence atmospheres to the educational cycle (Forcier, 1996).

Within the today's application, it is important to get the meaningful learning for the students' learning cycle. It is not necessary to get information directly from the instructors, what is important today is that experiencing reality, discovering reality with technology guidance. When we look at issues and ahead, we can commend that technology has main responsible process in instruction for today educational world. With the development of high technology improvements, students get main role in their learning process. Computers have role to support easy study of students with their learning process. Beside this, all students take advantage of learning opportunities technology offers within the instruction Grabe, et. al. 2001).

Following contemporary invention that is multiple intelligence is needed to them for contributing effective learning can get essential knowledge. Multiple intelligence refers that every person has different capacity to different activity for learning. By this way technology is a new dimension that provides multiple intelligence under the aim of stable effective learning. Because technology includes various alternatives that are visual, oral and textual elements in order to make individual easily catch information instantly. If we go deeper, we can easily realize that computer and its applications is a key factor to catch multiple intelligence opportunities for effective learning. Because, every individuals can find their needs under the wide range of functions of computers (Anderson and Noyes, 1999).

As we know that, research is main consideration to form alternatives and critical thinking by comparing all issues. Today, we can face with learning by doing, discovery learning and learning by searching. These concepts refer to understand that individualized learning becomes more needed to contribute stable learning among individuals. In addition to this, computer is basic home to get and apply all these items under the idea of equalities in education among all people. Because by the computer included learning, everyone get same chances to know and follow issues. Therefore considering issues should be done individually as being free. On the other

hand, research is key factor at computer based life in order to know and apply all situations in a useful way at individual life (Hakim, et. al., 1999).

In order to be reflective on the usage of computers and facilities, there should be examination of the thoughts, attitudes of students towards computer. Because based on the constructivist perspectives, students have great role in the learning process and much affected from the technology support to their education.

### **Aim of the Research**

Today, we can face with technology that effects on education by providing different cultural contexts and different life standards with globalisation impact and create programmed environment for students to learn efficiently. Technology becomes way of life at all societies and it becomes needed factor in order to get knowledge and facilities at all issues. Technology is a new revolution by changing learning atmosphere of students in educational systems at all societies. Every member of society should have an idea about technology in order to catch efficient and stable knowledge. Technology is main facilitator that provides to contribute system under requiring needed knowledge.

Technology provides us to know and follow all issues with the developments of high technology like computers. By this way, we can catch the multiple intelligence factors according to everyone, which is contemporary issue at learning process. As we know that multiple intelligence is about learning individually according to individual's needs and interests and capacities. In addition to this, we have to know meaning of learning which we should create some changes under the idea of stable useful learning. Learning is all sides of our lives that we face with every step of our life. But we should find what sort of activities affect our learning easily in order to store or make useful for our future life. Because of this reason, computer based learning and use of computers in educational world is way of providing stable and meaningful learning. In addition to this; it provides converting of educational, application changes.

With the involvement of the technology and computers to the instruction, there are accountable assumptions that students become to have developments on their learning. Many of the researches implicate that computer and high technology developments materials require equal standards, opportunities and meaningful learning for students. In order to understand effectiveness of computer, today application of the instruction that is student centred instruction will give the light to determine through examining the attitudes, tendencies of students towards technology, especially computers as the main indicator of technology and learning productivity (Forcier, 1996).

Computers and their facilitative components require the bridge of contemporary, meaningful learning. The main concern in the classroom instruction today is to integrate technology, computer with instruction. Because it enhance the learning, create update, contemporary understanding of students. Computers tools such as word processors, spreadsheets, databases and multi media authoring programs may help students learn actively. Through these implications, students become the responsible of the learning and constructivist approach reflects the personal understanding with help of the high technology (Grabe, et. al, 2001).

If the main concern is the examination of the how computer based learning effects the developments of learning of students, the attitudes, tendency and thoughts of the students should be handled. Therefore; application of computers to the instruction, statistical results from the questionnaire will reflect if there are the effects on developments of students' learning and what their attitudes towards computer. Through the research inclusion and problem sentence, research handled the problem sentence that is attitudes of students towards computers by applying questionnaires to students based on statistical evaluation.

### **Importance of Research**

Technology has impact on education with today's contemporary term as Educational Technology. Within this perspective; computers are one of the part of educational technology not replacing all technological developments but it is part of the common concern term. In here, it is time to examine what educational technology is in order to understand the role of computers in students' learning. Educational Technology is the combination of hardware and software applications in order to solve educational problems. Therefore; technology and computers are part of the educational technology as a implementation of technology into education. Technology in education as computers and computer base systems requires and concentrates to the how students can learn effectively. Computer and its productivity tools are in the role of delivering information and gathering information with easy path, directions. Technology and computers reflect support for new instructional approaches and create cooperative learning and shared intelligence (Roblyer, et. al., 2000).

Constructivist perspective also reflects and requires the role of the technology importance in education. There are many components of computer that facilitate the easy, stable and meaningful learning of students (Duffy, et. al., 1992).

There is a concrete role of computers in society and schools. It is discussable about bringing to educational change through computer developments. Computers provide work speed, work efficiency, work power and removal of human error from work activities. With these brief facilities, it is understandable that computers and

high information technology effect the students' learning and studying. It is questionable how effectively affect and what are the attitudes of students toward computer role in education (Maddux, et. al., 1997).

Computer-based learning is a new and contemporary trend that has wide range of affections in education. It has an effect on education by influencing the students learning as productivity tools of technology. By computer and its application, wider tools; students can catch stable, contemporary knowledge with its alternative standards. Because of that, the aim of this research was defined as to make awareness of new trends and tendency about computer and its effects in education as being support of student's meaningful learning. The importance of the research is to point out that computer has an impact on students' learning developments and in today student centred instruction, the attitudes of the students can only reflect the use of computers and facilities. In addition to this, attitudes towards technology can be determined through knowing the attitudes about computer in educational cycle.

### **Related Researches**

Heinich, Molenda, Russell (1993) took the issue of "Computers" with handling computers and individualized instruction, background on computers in education and training, advantages of computer and its limitations as well. In addition to this, roles of computers in education and training is examined by reflecting the topics of the computer as an object of instruction, the computer as tool for instruction, computer assisted instruction, computer managed instruction, computer networks, computer generated instructional materials, computer-based instructional design and materials. Authors defined the advantages of computers as allowing students to learn at their own pace produces significant time saving over conventional classroom instruction, high speed personalized responses to learner actions yield a high rate of reinforcement, patient, personal manner that can be programmed provides more positive climate, computers can provide coverage of growing knowledge base associated with the information explosion, provides reliable and consistent instruction from learner to learner, improve efficiency and effectiveness. As a summary, beside the some kind of limitations like cost, research results from various levels education show that computer based instruction generally positive effects on student's achievement.

Grabe (2001) reflects the issue of "Using Instructional Software for Content-Area Learning". The computer applications have great role in the instruction. The reflected issue contains what is instruction and how traditional instructional activities challenged by the development of high technology and computer-based instruction, computer facilities. For practicing, reaching high quality technology-based learning experiences for students, computers should create tendency from the students and be part of the instruction based on constructivist approach.

Forcier (1996) reflects the role of computers in education. The important points in here is that students should be in consciousness of the place of computer application in education, strategies for using computers, instruction and learning and issues, trends in information technology in order to shape right and concrete attitudes for technology and computers in instruction. The most important reflection is that computer application in education provides student-centered learning instead of teacher centered learning and learning becomes based on constructivist approach in order to create motivation and communication within instruction by the help of the computer and high technology materials.

Maddux, Johnson, Willis (1997) reflects the role of computers in education. Beside the role of computers in education, computers have particular roles in society and school worlds. With the technological success and change, computers become to have powerful place in society and education. The concept of working speed, efficiency, power, and the removal of human error from work activities carry us to intensify on the technology and computers. Computers increase the human interaction within the educational context. Therefore; Educational computing is an exciting new discipline whose effectiveness will depend on how today's teachers in training use computers in their own classrooms in the future.

Wiburg (1991) examines the discussion of technology from point of the teachers in education. The content reflects what students should know, the changes of teachers about their roles, new evaluation methods, developments of computer-based courses. The article includes the importance of technology and changeable role vision of teachers based on the technology included courses.

Snowman (1995) discusses the solutions and evaluations study about the computer based technology in students' success, academic achievement, students' behaviors and attitudes. The study was based on the reviews, exercises and applications. Computer Based Education programs criteria gives the light to evaluation as a list. The age, capability, program varieties are the effective in Computer Based Education.

Brown, Edmund (1982) handled the computers and schools in their studies. The importance point of the research is that computer has a great role on education as a professional tool. There were suggestions to apply the Computer Based Education programs and consideration of finance based on particular projects. In addition to this, there are suggestions to let teachers get courses and how efficient use of computers can be occurred.

Rohwedder (1990) handled the concept of creativity and new trends through the Computer Based Education. Educators increase the power of the computers with the environmental education. Therefore; environmental education provides easy, alternative solutions for the power of computers.

Kılınçoğlu, Altun (2002) handles the Attitudes of Students towards Computer Based Education in Secondary Schools. The aim of the study is to develop the scale for the evaluating students' attitudes towards computer-based education. A study has been carried out in order to test the validity and reliability of data collected from the four different types of schools, including 1303 students. The purpose of the study is the both develop a questionnaire to measure students' attitudes toward computer-assisted instruction and to determine high schools students' attitudes toward computer assisted instruction in relation to gender, prior experience with computers and different school types.

## **Method**

### Operational Definition of Variables

This study was designed to examine attitudes of graduate and undergraduate students about computers and to compare their tendencies based on their personal information, attitude questions about computers. Independent and dependent variables in this study were as follows:

Independent variables: Students' Characteristics.

- 1- Gender.
- 2- Education level of their mothers.
- 3- Education level of their fathers.
- 4- Having computers at their homes.
- 5- Having computer education.
- 6- Position of students at academic area.

Dependent variables: Students' perceptions were evaluated by survey.

1. I am not afraid to engage with computer.
2. I have no enough skills to use computer.
3. I want to do my studies at computers.
4. I involve computers to my life at all fields.
5. Engaging with computers make me angry.
6. If there should be problem to solve in computer, I try to solve problem.
7. It is not interesting to solve problems with computers.
8. Learning computers is only losing time for me.
9. I do not believe that I can be successful at any computer lesson.
10. I do not want to use computer out of needing it.
11. Studying at computers requires good emotions for me.
12. I like to read books for getting information about computers.
13. I hate from computers.
14. I believe that I can do all my studies with the help of computers.
15. I do not try to overcome problems at computers.
16. I have to know using computer for my future success.
17. It is very hard task to participate any kind of courses for learning computer for me.
18. I believe that I will not be good user at computer.
19. I stand in front of the computer until overcoming problem about computer program when I face with.
20. I do not believe that I can get help from computer in my daily life.
21. I become uncomfortable while the concept is computer in atmosphere around me.
22. I can learn computer language with myself.
23. I do not pay any money for having computer related books.
24. I do not escape to experience new update products at computers.
25. It is enjoyable for me to learn new things in computer courses.
26. It is difficult to use computers.
27. I do not want to stop while engaging with computer.
28. Computers increase probability of finding jobs.
29. I get nervous when I think on studying with computers.
30. I become successful in my computer courses.
31. It becomes so far for me to use computers.
32. I do not want to solve problems with computers while there are other materials.
33. If I have to use computers, I do not think that it will be problem for me.
34. I do not become uncomfortable while the concept is computer in atmosphere around me.
35. If I could not overcome problem that I faced with, I continue to think on that.
36. It is important to me to become successful in my computer courses.
37. Computers confuse my mind.
38. If the matter is computer, I trust my self.
39. I do not like to talk with other people about computers.

40. It is not obligation to know computer in order to find job.

### **Identification of the Population**

The population under investigation included undergraduate and graduate students taking courses during Fall 2002-2003 school year in Eastern Mediterranean University at Northern Cyprus.

### **Sample**

Sample selected by the method of random sampling as a hundred fifty five students registered in courses during Fall 2002-2003 school year in Eastern Mediterranean University who are graduate and undergraduate students.

### **Instrument**

For this research study, questionnaire was designed for analyzing students' attitudes towards computers. Survey was designed according to outlines of "Tendency Towards Computer Based Education of Students at Secondary Schools" (Kılınçoğlu, Altun, 2002). There were 46 items at this instrument. Their responses that are representing forty items are on a series five-point Likert-scale. (5=strongly disagree and 1=strongly agree).

### **Data Collection**

In Eastern Mediterranean University graduate and undergraduate students' perceptions were analyzed through the prepared questionnaire. Students' responses to the questionnaire were statistically analyzed according to gender, education level of their mothers, education level of their fathers, having computers at their homes, having education about computer and position of students.

### **Data Analysis Procedures**

Questionnaire as survey was designed to get the perceptions of students towards computers.

### **Data Analysis and Presentation of Findings**

The main purpose of this study was to investigate students' attitudes about computers based on gender, education level of their mothers, education level of their fathers, having computers at their homes, having education about computer and position of students by the support of statistical analysis and evaluation that questionnaire results are the basis of these evaluations.

The light of quantitative data analysis examines demographic data and frequencies for all items in the survey.

#### Demographic Data

The first six items of survey asked for "Personal Data", including the variable of gender, education level of their mothers, education level of their fathers, having computers at their homes, having education about computer and position of students.

An analysis of the characteristics of the target population for the study indicated that 29% (45) male and 66.5% (103) female responded the questionnaire.

Similarly, 25.8% (40) of the students responded that their mothers' education level at primary school, 15.5% (24) of the students responded that secondary school level, 39.4% (61) of the students responded as high school level, 3.2% (5) of the students responded as undergraduate level, 9% (14) of the students responded as graduate level and 3.2% (5) of the students responded as postgraduate level by comparing their mothers' education level.

About 21.3% (33) of the students responded that their fathers' education level at primary school level, 12.3% (19) of the students responded that secondary school level, 27.1% (42) of the students responded as high school level, 2.6% (4) of the students responded as undergraduate level, 22.6% (35) of the students responded as graduate level and 10.3% (16) of the students responded as postgraduate, on the other hand 1.3% (2) of the responded that their fathers have doctor level by comparing their fathers' education level.

Similarly, 82.6% (128) of students responded "Yes" the question of "Do you have computer at your home?" and on the other hand 12.9% (20) of students responded "No" to this question.

About 60.6% (94) of students responded yes to the question of "Have you ever get computer education?" and 32.4% (53) of the students responded no to this question.

Similarly, 57.4% (89) of the students is at university level, 30.3% (47) of the students is at the master level and 0.6% (1) of the student are over master level according to their position.

#### Frequencies of Individual Items

According to the single item indicating overall strongly agree to strongly disagree with Internet attitudes, it appears that the Eastern Mediterranean University students were strongly agree, agree, undecided, disagree, and strongly disagree with the survey items. The frequencies of the items are shown in table 1:

**Table 1: Frequencies and Percentages of Individual Items**

	Strongly agree		Agree		Undecided		Disagree		Strongly disagree	
	f	%	f	%	f	%	f	%	f	%
I am not afraid to engage with computer.	39	58.7	28	18.1	9	5.8	9	5.8	19	12.3
I have no enough skills to use computer.	9	5.8	32	20.6	23	14.8	50	32.3	40	25.8
I want to do my studies at computers.	60	38.7	40	29	22	14.2	12	7.7	15	9.4
I involve computers to my life at all fields.	37	23.9	34	21.9	29	18.7	41	26.5	13	8.4
Engaging with computers make me angry.	13	8.4	19	9.7	23	14.8	47	30.3	54	34.8
If there should be problem to solve in computer, I try to solve problem.	45	29	57	36.8	18	11.6	22	14.2	11	7.1
It is not interesting to solve problems with computers.	16	10.3	25	16.1	36	23.2	46	29.7	31	20
Learning computers is only losing time for me.	17	11	5	3.2	12	7.7	38	24.5	83	53.5
I do not believe that I can be successful at any computer lesson.	7	4.5	14	9	18	11.6	42	27.1	74	47.7
I do not want to use computer out of needing it.	15	9.7	28	18	24	15.5	41	26.5	46	29.7
Studying at computers requires good emotions for me.	26	16.8	44	28.4	32	20.6	36	23.2	17	11
I like to read books for getting information about computers.	22	14.2	30	19.4	21	13.5	54	34.8	27	17.4
I hate from computers.	11	7.1	13	8.4	15	9.7	33	21.3	83	53.5
I believe that I can do all my studies with the help of computers.	48	31	66	42.6	20	12.9	13	8.4	7	4.5
I do not try to overcome problems at computers.	13	8.4	25	16.1	23	14.8	59	38.1	35	22.6
I have to know using computer for my future success.	67	43.2	45	29	16	10.3	16	10.3	11	7.1
It is very hard task to participate any kind of courses for learning computer for me.	10	6.5	15	9.7	32	20.6	58	37.4	37	23.9
I believe that I will not be good user at computer.	20	12.9	20	12.9	21	13.5	44	28.4	50	32.4
I stand in front of the computer until overcoming problem about computer program when I face with.	16	10.3	45	29	41	26.5	34	21.9	15	9.7
I do not believe that I can get help from computer in my daily life.	6	3.9	9	5.8	25	16.1	45	29	69	44.5
I become uncomfortable while the concept is computer in atmosphere around me.	6	3.9	10	6.5	22	14.2	48	31	68	43.9
I can learn computer language with myself.	24	15.5	41	26.5	50	32.3	25	16.1	14	9
I do not pay any money for having computer related books.	25	16.1	29	18.7	32	20.6	33	21.3	33	21.3
I do not escape to experience new update products at computers.	30	19.4	52	33.5	36	23.2	18	11.6	19	12.3
It is enjoyable for me to learn new things in computer courses.	52	33.5	56	36.1	17	11	12	7.7	18	11.6
It is difficult to use computers.	2	1.3	11	7.1	13	8.4	33	21.3	32	20.6
I do not want to stop while engaging with computer.	34	21.9	47	30.3	29	18.7	25	16.1	15	9.7
Computers increase probability of finding jobs.	61	39.4	55	35.5	19	12.3	14	9	3	1.9
I get nervous when I think on studying with computers.	10	6.5	15	9.7	24	15.5	49	31.6	49	31.6
I become successful in my computer courses.	43	27.7	55	35.5	29	18.7	21	13.5	3	1.9
It becomes so far for me to use computers.	4	2.6	14	9	15	9.7	56	36.1	58	37.4
I do not want to solve problems with	6	3.9	26	16.8	33	21.3	47	30.3	36	23.2

computers while there are other materials.										
If I have to use computers, I do not think that it will be problem for me.	46	29.7	64	41.3	20	12.9	11	7.1	8	5.2
I do not become uncomfortable while the concept is computer in atmosphere around me.	36	23.2	66	42.6	20	12.9	23	14.8	5	3.2
If I could not overcome problem that I faced with, I continue to think on that.	30	19.4	50	32.3	29	18.7	28	18.1	13	8.4
It is important to me to become successful in my computer courses.	43	27.7	61	39.4	24	15.5	17	11	5	3.2
Computers confuse my mind.	10	6.5	19	12.3	26	16.8	47	30.3	50	32.3
If the matter is computer, I trust my self.	23	14.8	41	26.5	46	29.7	29	18.7	12	7.7
I do not like to talk with other people about computers.	12	7.7	22	14.2	26	16.8	48	31	40	25.8
It is not obligation to know computer in order to find job.	11	7.1	19	12.3	20	12.9	36	23.2	64	41.3

Research model is a design of research and gives direction to all activities. At this research, in order to create varieties of data about computers and to realize people’s reflections t-test and one-way ANOVA as a statistical measurement were used to clarify the differences between dependent and independent variables.

**t-test of Individual Items**

According to Independent Samples Test results at table 2 that were done for gender; as indicated above, all values are higher than the standard value that is 0.05 except the values of I like to read books for getting information about computers (0.020), I do not pay any money for having computer related books (0.039), I do not escape to experience new update products at computers (0.036), and It is difficult to use computers (0.007), which are representing meaningful difference between gender variations, on the other hand other values indicate no meaningful difference between genders based on their responds.

**Table 2: t-test Independent Samples**

	t-test for Equality of Means - Sig. (2-tailed)		
	Gender	Do you have any computers in your homes?	Have you get computer education?
I am not afraid to engage with computer.	.747	.520	.161
I have no enough skills to use computer.	.107	.248	<b>.001</b>
I want to do my studies at computers.	.321	.312	.491
I involve computers to my life at all fields.	.840	.132	<b>.017</b>
Engaging with computers make me angry.	.717	.580	.745
If there should be problem to solve in computer, I try to solve problem.	.860	.136	.150
It is not interesting to solve problems with computers.	.270	.851	.721
I do not want to use computer out of needing it.	.178	.721	.155
Learning computers is only loosing time for me.	.533	.594	<b>.045</b>
I do not believe that I can be successful at any computer lesson.	.082	.152	<b>.049</b>
Studying at computers requires good emotions for me.	.451	.188	.165
I like to read books for getting information about computers.	<b>.020</b>	.563	.127
I hate from computers.	.737	.700	.383
I believe that I can do all my studies with the help of computers.	.934	.319	.427
I do not try to overcome problems at computers.	.081	.521	<b>.026</b>
I have to know using computer for my future success.	.838	.282	.238
It is very hard task to participate any kind of courses for learning computer for me.	.846	.499	.661
I believe that I will not be good user at computer.	.584	.239	.702
I stand in front of the computer until overcoming problem about computer program when I face with.	.071	.864	<b>.001</b>
I do not believe that I can get from computer in my daily life.	.234	.334	.416

I become uncomfortable while the concept is computer in atmosphere around me.	.952	.293	.654
I can learn computer language with myself.	.131	.626	.131
I do not pay any money for having computer related books.	<b>.039</b>	.662	<b>.004</b>
I do not escape to experience new update products at computers.	<b>.036</b>	.682	<b>.018</b>
It is enjoyable for me to learn new things in computer courses.	.267	.331	.109
It is difficult to use computers.	<b>.007</b>	.736	.391
I do not want to stop while engaging with computer.	.466	.139	.378
Computers increase probability of finding jobs.	.463	.263	.844
I get nervous when I think on studying with computers.	.051	.085	<b>.021</b>
I become successful in my computer courses.	.932	.480	.072
It becomes so far for me to use computers.	.675	.319	<b>.043</b>
I do not want to solve problems with computers while there are other materials.	.237	.514	.400
If I have to use computers, I do not think that it will be problem for me.	.997	.409	.822
I do not become uncomfortable while the concept is computer in atmosphere around me.	.188	.227	.183
If I could not overcome problem that I faced with, I continue to think on that.	.530	.143	<b>.005</b>
It is important to me to become successful in my computer courses.	.898	.525	<b>.023</b>
Computers confuse my mind.	.054	.123	.064
If the matter is computer, I trust my self.	.073	.440	<b>.002</b>
I do not like to talk with other people about computers.	.173	.615	.145
It is not obligation to know computer in order to find job.	.090	.154	.300

According to Independent Samples Test results at table 2 that were done for having computer at home; as indicated above, all values are higher than the standard value that is 0.05 which are representing no meaningful difference between statements and having computer in their homes based on their responds.

According to Independent Samples Test results at table 2 that were done for evaluating the question of “Have you get computer education?” as indicated above some of the values that are higher than standard value indicate no meaningful difference between statements and question. On the other hand, statements I have no enough skills to use computer I have no enough skills to use computer (0.001), I involve computers to my life at all fields (0.017), Learning computers is only losing time for me (0.045), I do not believe that I can be successful at any computer lesson (0.049), I do not try to overcome problems at computers (0.026), I stand in front of the computer until overcoming problem about computer program when I face with (0.001), I do not pay any money for having computer related books (0.04), I do not escape to experience new update products at computers (0.018), I get nervous when I think on studying with computers (0.021), It becomes so far for me to use computers (0.045), If I could not overcome problem that I faced with, I continue to think on that (0.005), It is important to me to become successful in my computer courses (0.023), and If the matter is computer, I trust my self (0.002) indicate that there are meaningful difference between these statements because of reflecting lower value from standard value.

### ANOVA of Individual Items

According to ANOVA results at table 3 that were done for the education level of student’s mothers as indicated, all of the values except one statement represent higher value than standard value that is .05.

**Table 3: ANOVA analysis**

	Sig.		
	Mother’s education level	Father’s education level	Student’s academic position
I am not afraid to engage with computer.	.436	.326	.766
I have no enough skills to use computer.	.635	.263	<b>.006</b>
I want to do my studies at computers.	.387	.412	<b>.005</b>
I involve computers to my life at all fields.	.270	.326	<b>.012</b>
Engaging with computers make me angry.	.469	.713	.391
If there should be problem to solve in computer, I try to	.667	.935	<b>.014</b>

solve problem.			
It is not interesting to solve problems with computers.	.158	.296	<b>.023</b>
I do not want to use computer out of needing it.	.152	.251	<b>.020</b>
Learning computers is only loosing time for me.	<b>.032</b>	.178	<b>.001</b>
I do not believe that I can be successful at any computer lesson.	.520	.791	.134
Studying at computers requires good emotions for me.	.787	.173	<b>.028</b>
I like to read books for getting information about computers.	.930	.380	.064
I hate from computers.	.280	.370	.102
I believe that I can do all my studies with the help of computers.	.209	.779	<b>.010</b>
I do not try to overcome problems at computers.	.731	.604	.395
I have to know using computer for my future success.	.327	.256	<b>.045</b>
It is very hard task to participate any kind of courses for learning computer for me.	.134	.265	<b>.004</b>
I believe that I will not be good user at computer.	.590	.277	.520
I stand in front of the computer until overcoming problem about computer program when I face with.	.968	.693	<b>.022</b>
I do not believe that I can get from computer in my daily life.	.423	.221	.319
I become uncomfortable while the concept is computer in atmosphere around me.	.452	.244	.092
I can learn computer language with myself.	.376	.525	<b>.001</b>
I do not pay any money for having computer related books.	.902	.706	<b>.005</b>
I do not escape to experience new update products at computers.	.301	.646	.064
It is enjoyable for me to learn new things in computer courses.	<b>.004</b>	<b>.026</b>	.271
It is difficult to use computers.	.345	.803	.065
I do not want to stop while engaging with computer.	.842	.234	<b>.009</b>
Computers increase probability of finding jobs.	.585	.774	.527
I get nervous when I think on studying with computers.	.292	.807	<b>.016</b>
I become successful in my computer courses.	.554	<b>.012</b>	.099
It becomes so far for me to use computers.	.084	.170	<b>.015</b>
I do not want to solve problems with computers while there are other materials.	.782	.066	<b>.012</b>
If I have to use computers, I do not think that it will be problem for me.	.148	.715	.638
I do not become uncomfortable while the concept is computer in atmosphere around me.	.193	.408	<b>.013</b>
If I could not overcome problem that I faced with, I continue to think on that.	.585	.558	<b>.006</b>
It is important to me to become successful in my computer courses.	.581	.579	<b>.000</b>
Computers confuse my mind.	.925	.252	<b>.018</b>
If the matter is computer, I trust my self.	.437	.740	<b>.007</b>
I do not like to talk with other people about computers.	.833	.931	.203
It is not obligation to know computer in order to find job.	.528	.108	<b>.000</b>

According to ANOVA results at table 3 that were done for the students' mother education level, all values are higher than the standard value that is 0.05 except the values of Learning computers is only loosing time for me (0.032), and It is enjoyable for me to learn new things in computer courses (0.004), which are representing meaningful difference between statements and students' mother education based on their responds.

According to ANOVA results at table 3 that were done for the students' father education level, all values are higher than the standard value that is 0.05 except the values of It is enjoyable for me to learn new things in computer courses (0.026), and I become successful in my computer courses (0.012), which are representing meaningful difference between statements and students' father education based on their responds.

According to ANOVA results at table 3 that were done for the students' academic position, all values are higher than the standard value that is 0.05 except the values of I have no enough skills to use computer (0.006), I want

to do my studies at computers (0.005), I involve computers to my life at all fields (0.012), If there should be problem to solve in computer, I try to solve problem (0.014), It is not interesting to solve problems with computers (0.023), I do not want to use computer out of needing it (0.020), Learning computers is only losing time for me (0.001), Studying at computers requires good emotions for me (0.028), I believe that I can do all my studies with the help of computers (0.010), I have to know using computer for my future success (0.045), It is very hard task to participate any kind of courses for learning computer for me (0.004), I stand in front of the computer until overcoming problem about computer program when I face with (0.022), I can learn computer language with myself (0.001), I do not pay any money for having computer related books (0.005), I do not want to stop while engaging with computer (0.009), I get nervous when I think on studying with computers (0.016), It becomes so far for me to use computers (0.015), I do not want to solve problems with computers while there are other materials (0.012), I do not become uncomfortable while the concept is computer in atmosphere around me (0.013), If I could not overcome problem that I faced with, I continue to think on that (0.006), It is important to me to become successful in my computer courses (0.000), Computers confuse my mind (0.018), If the matter is computer, I trust my self (0.007), and It is not obligation to know computer in order to find job (0.000) which are representing meaningful difference between statements and students' academic position based on their responds.

### **Comments and Recommendations**

All reflections about the study that is “students' perceptions towards computers” concluded that students give importance to the computers as a part of their life. In addition to this, research results represent that high percentages concentrated on that there are positive attitudes towards computers because of being tool to organize life efficiently.

When it is examined the results of research and questionnaire, students have positive tendency the useful and easy reflections of computers. This means that there is a consciousness about effects and importance of computers but there are a few tendencies to apply the consciousness or willingness of new technological style because of not having particular education, encouragement and facilitative environment.

Computer-based learning is a new trend that has wide range of affections on all areas. It has an effect on education by influencing the students learning as a being technological and cultural functions. By computer, students can catch stable, contemporary knowledge with its multi functional tools. While thinking contemporary educational context, dealing with application of knowledge, research for learning become vital part on students and educators environment. Because of this reason, the aim of this study was defined as to make awareness of new trends and tendency about computer and its effects at education as being influencer on student's learning. On the other hand, computer has a facility to improve creative and critical thinking of students by providing research facilities and provide huge amount of storage, fast easy study for people who have ability to use. The importance of the study is to emphasis that computer has an impact on people especially for students' learning and researching process by providing stable and active learning with its applicable and helpful property about students' knowledge. Computer is key issue that is providing people a sense of application, self-responsibility and self-decisions choices while doing their own studies. People become active role while they are learning at computers and they also need guidance to shape them in a correct way.

In addition to this, by the evaluation of all statistical implementations which are T-test as independent, ANOVA and frequency evaluations based on questionnaire results reflect that there is no meaningful difference between statements and gender, statements and the questions which are Have you ever get computer education? , Do you have computer in your house? , What are the education level of both mothers and fathers?, What are your position as student? based on the independent sample t-test. But some of the statements represent the meaningful differences among the statements of gender, Have you ever get internet education?, Do you have computer in your house?, What are the education level of both mothers and fathers?, What are your position as student?.

As it is realized that most of students believe that computers, tendency to use computer has effective and useful facilities at competitive environment and they are consciousness about its facilities and trends. In addition to this, they support that students need a computer education to get efficient studies in order to get related knowledge. At these conclusions, by following new trends and tendency to use computers in order to help future success of students is necessary. Because of these reasons, people should accept that computer has a great influence on educational context. As a result, computer can be worked better as a being great influencer and creating active learning for students and easy way to solve educational and study-based problems instead of being problematic for their life.

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