

## **TURKISH HIGH SCHOOL STUDENTS' CONSIDERATIONS, EXPECTATIONS AND AWARENESS ON DISTANCE EDUCATION**

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### **ABSTRACT**

Quality of distance education has been improving by technological developments, experiences of educators and feedbacks of learners. In order to improve the quality issues in distance education, considerations of target audiences are important to understand their expectations that might be clue for developers. Therefore, the purpose of this descriptive study was to investigate Turkish high school students' considerations, expectations and awareness related to distance education, especially e-learning, and its implementations. Totally, 1224 students studying at 8 different high schools from 6 cities in 4 different regions Turkey participated to the study. Majority of the students were from computer departments of Vocational High Schools. Researchers attempted to collect data representatively in order to draw a framework about the research questions for Turkish case.

Results of the study showed that students associated distance education to e-learning. Additionally, although students have technological competencies which are critical factors for e-learning applications, they did not prefer taking their university education distance education programs. However, they have huge tendency in terms of taking some courses via the Internet.

**Keywords:** Distance Education; culture; e-Learning; quality; High School; awareness

### **INTRODUCTION**

Majority of people prefer using technology, especially the Internet, in their daily life for information and communication needs. In educational settings, technological applications are becoming more and more popular among both educators and students. Educational institutions have been attempting to integrate and implement better ways of new technologies in order to provide more learning possibilities to their students (Ortiz-Rodriguez, Telg, Irani, Roberts & Rhoades, 2005). According to Stella and Gnanam (2004), because of the technological developments, there has been significant improvement in terms of appearance of various forms of the education since the last two decades. Learning and teaching have been transformed as a result of the Internet which has speedily growing popularity and widespread use (Jones & Peachey, 2005).

One of the prominent technological developments, distance education, is eliminating border of the physical distance among learners and instructors who are far from each other.

As Ortiz-Rodriguez, Telg, Irani, Roberts & Rhoades (2005) stated "distance education has benefited from the development of technological communication tools available through the Internet that allow for an increase in communication and, consequently in feedback.

These communication tools have become more accessible and friendlier to use, allowing students to have greater opportunities through distance learning. E-mail, discussion forums, and chat rooms are commonly used to complement instruction in distance education." (p. 103).

It is obvious that implementations based on technological developments have changed some concepts and habits of education. By using distance education, especially e-learning, during teaching and learning process, both students and teachers do not have to consider time and physical places.

Husson and Waterman (2002) stated that technology is leading a new approach of teaching and learning process which eliminates barriers in terms of the situations about time and place while serving educational materials, teaching concepts and establishing communication channels among students. Besides, distance education has been shifting from the less technological to more based on technological developments and brings new approaches to the field. E-learning that provides more technological infrastructure is getting more roles in distance education. Therefore, e-learning applications have been becoming one of the most important parts of the educational settings all around the world (Suanpang, Petocz & Kalceff, 2004).

#### **REVEALING QUALITY ISSUES FOR E-LEARNING**

When an e-learning application is integrated and implemented within an educational setting, some precautions should be taken into account that might have vital impact on learning process. One of these precautions is quality issues of e-learning. Quality of e-learning is being a prominent issue for both researchers and practitioners (Pawlowski, 2003), and some quality approaches that aims to increase quality of the field of e-learning gaining much more importance (Hildebrandt & Teschler, 2004). According to Ehlers and Pawlowski (2004), quality concept in e-learning is a debatable subject and dynamics of quality is not defined clearly.

There are several research studies focusing on quality issues of e-learning. For instance, Husson and Waterman (2002) tried to examine and identify the criteria used in defining the quality inputs of the e-learning process. Mills, Eyre and Harvey (2005) attempted to examine the influences of cultures on the successful learning in traditional open education and e-learning. Stella and Gnanam (2004) emphasized the aspects of distance education by arguing the quality assurance of distance education. Jones and Peachey (2005) investigated interactions on five online courses involving staff by analyzing the socialization on e-moderator course.

Thomas and Caswell (2000) described how the Computing Department of the Open University uses the Internet as a collaborative learning supporter in educational process. They also aimed to investigate whether electronic communication tools might replace with traditional ones for the whole educational process or not.

Suanpang, Petocz and Kalceff (2004) conducted a study focusing on the comparison of the two groups of students who were using e-learning and traditional lecture based approach. As Hildebrandt and Teschler (2004) stated that different techniques and methods have been developed in order to improve the quality of the e-learning.

In addition to these studies, there are other types of studies that aim to harmonize the quality approaches of e-learning and standardize quality in e-learning process.

One of these studies is European Quality Observatory (EQO) which "contains a knowledge base which is the base for harmonizing the isolated approaches leading to a reference framework for E-Learning quality" (Pawlowski, 2003). This approach provides a conceptual framework on European Level in terms of "analysis, description and comparison of quality" approach in e-learning.

## **DISTANCE EDUCATION AND TURKEY**

In Turkey, distance education programs are available since 1929 and about 1.6 million students are enrolled distance education programs at different levels, elementary, high school and higher education (Ozkul, 2001). People, especially elders, prefer open education for elementary and high schools. According to Mutlu (2004) most of students enroll open education because;

- to have a better job,
- being elder age,
- the military service (for men),
- being physically handicapped and
- being in prison".

On the other hand, most of the men enroll Open University for only "deferring military service" (Ozkul, 2001). Because most of them enroll for out of education purposes, dropout rates also very high which is around 40% (Ozkul, 2001). According to Ozkul, major reasons for dropout; social issues like military service, technical issues like insufficiency of telecommunication opportunities with students, organizational issues because of highly centralization of education, and effectiveness issues.

Ozkul states that in order to enhance the "quality" and "effectiveness" of educational system, some improvements and changes has been implemented since 1998 and it has begun e-learning applications.

The problems mentioned above, definitely influence perception and quality issues of distance learning of current and prospective students of open learning. To decrease dropout rates, developers of distance programs should consider needs of prospective students and change negative attitudes or perceptions in a positive way. Also expectations of prospective students from distance learning can be useful for improving the quality of it.

Frydenberg (2002) supports this idea by including the students' services in quality of open learning. Frydenbergs stated that prospective students should be able to understand opportunity of learning is available and they have opportunity to obtain accurate information about program.

## **SIGNIFICANCE of THE STUDY**

Under the light of the aforementioned statements, it might be easily said that there are several factors influencing the quality of e-learning. Some of these factors are characteristics and needs of students. According to Husson and Waterman (2002), to increase the quality of e-learning applications the needs of students should be taken into consideration. In this study we aimed to investigate Turkish high school students' considerations, expectations and awareness concerning distance education, especially e-learning, and its implementations. Main Research Question: What are the Turkish high school students' considerations, expectations and awareness concerning distance education?

### **Sub-research questions**

- 1. What are the students' preferences on distance education?**
- 2. What are the students' misconceptions about distance education?**
- 3. What are the advantages and drawbacks of distance education from the students' points of view?**
- 4. What are the students' expectations from distance education?**
- 5. What are the differences between genders in terms of considerations, expectations and awareness on distance education?**
- 6. What are the requirements to improve quality of distance education basing on the students' considerations, expectations and awareness?**

## **METHODOLOGY**

### **Instrument**

The data collection instrument used for this study includes seven demographics, eleven multiple-choice, two open-ended, and ten Likert-type questions. Each question includes an open-ended "other" choice. The questions investigate students' use of computers and the Internet, use of the Internet for educational purposes, their future thoughts about taking university degree via e-learning. A pilot study was conducted with thirty-seven high school students, and the questions were modified for the main study in accordance with these pretest-participants' responses and comments.

### **Data Collection Procedure**

A total of 1550 questionnaires were distributed to ten different vocational high schools, in six cities within four different regions in Turkey. A total of 1224 questionnaires from eight different high schools, in six cities within four different regions in Turkey, were returned.

The questionnaires were administered by computer education teachers in these schools, and were completed by the student responders in computer labs during the space of one course hour. The teachers were provided a guide to implement the questionnaires properly. They were especially requested not to give clues regarding the open-ended questions and not to interfere in any way with the students' provision of answers.

### **Data analysis**

The data collected from the questionnaires were analyzed by calculating frequencies of responses for the demographics and multiple-choice questions. The open-ended questions were subjected to content analysis.

Each answer in the open-ended questions was analyzed and assigned a code from a bank of codes that was created at the beginning of the analysis process.

Then, the answers marked with each individual code were counted to reveal the frequencies for each code. There are some missing data especially for open-ended questions, so for each question, the number of responses will be given at first.

## **FINDINGS**

It was expected that vocational high school students' considerations concerning distance education, especially e-learning, are higher than other kind of high school students, because of Turkish educational system which allows vocational high school students to enter limited departments of universities serving face-to-face education in Turkey.

Therefore, very few number of vocational high school students can enter to the departments apart from allowed ones. Besides, majority of the participants in this study were studying at computer departments in their high schools, thus their high computer and Internet competencies might help them to be aware of e-learning and its opportunities.

Among the respondents of distributed questionnaires, 592 of students were female, 629 of students were male and 3 of the students did not state their gender. Students' grade levels were distributed as 167 9<sup>th</sup> grades, 773 10<sup>th</sup> grades, 232 11<sup>th</sup> grades and 46 12<sup>th</sup> grades. Especially, 10<sup>th</sup> and 11<sup>th</sup> grade students were intended to participate in the study because they were studying for university entrance exam.

As expected at the beginning of the study, computer ownership and competencies of students were high. According to the results, totally 662 of students (404 male and 258 female) had a computer at home and 560 of them had no computer.

Although majority of the students had computer at home, their Internet connection at home was not the highest one.

As seen from the Table: 1,312 students (190 male and 112 female) had Internet connection at home, and 835 of them (428 male and 406 female) used Internet outside respectively; Internet café (n=438), school (n=280), friends (n=74) and other places (n=43) like relatives, working place, and library. 74 of the students stated that they have not used Internet (12 male and 62 female).

In Internet café use, males were more dominant than females. Whereas number of the males using these places was 266, number of females was 171.

These differences might be from the perceptions of the Internet cafés where considered as boys' places to play game in Turkey. Similarly, they were dominant home Internet users when it is compared to girls'. 190 males stated that they have chance to use Internet at their home, and only 112 females have chance.

However, in school labs usages, females with n = 164 were more dominant than males with n = 116 in terms of the Internet use. This might be caused from their lack of chance to use Internet at home and in Internet cafés.

**Table: 1**  
**Place of Internet use**

Place	Gender	N	F
Home	Male	190	30.74
	Female	112	21.62
Internet café	Male	266	43.04
	Female	171	33.01
School	Male	116	18.77
	Female	164	31.66
Friends	Male	24	3.88
	Female	50	9.65
Other	Male	22	3.56
	Female	21	4.05

When Internet use duration increased, the ratio females about Internet use decreased more than males (Table 2). Among students using Internet, 720 of them (345 males and 375 females) use it 1-5 hours in a week, 224 of students (136 males and 88 females) use 6-10 hours in a week and 212 of them (140 males and 72 females) use more than 10 hours in a week.

Because, males might have more alternative places to use the Internet and they use the Internet at home more than females, their Internet use ratios were higher than females.

**Table: 2**  
**Internet use duration (weekly)**

Hours	Gender	N	F
1-5 hours	Male	34	55.56
	Female	37	70.09
6-10 hours	Male	5	
	Female	13	21.90
More than 10 hours	Male	88	16.45
	Female	14	22.54
	Female	72	13.46

The main purpose of the Internet use also differs among males and females (Table 3). Most of the student with n = 885 (481 males and 402 females) use the Internet to find information, 868 students (434 males and 431 females) use the Internet for doing homework, and 604 students (381 males and 223 females) use Internet for chatting. In addition, 486 students (303 males and 183 females) use the Internet for playing online games, and 402 students (260 males and 140 females) use the Internet for communicating with e-mail.

It seems that males were more dominant to use Internet for chat, game and e-mail activities when they were compared with their counterparts. Nevertheless, tendencies of the Internet use among females were mainly about scholar activities such as accessing to information and doing homework.

**Table: 3**  
**Internet use aims among participants**

Internet use aims	Gender	N	F
Take information	Male	481	77.46
	Female	402	75.14
Homework	Male	434	69.89
	Female	431	80.56
Chat	Male	381	61.35
	Female	223	41.68
Game	Male	303	48.79
	Female	183	34.21
E-mail	Male	260	41.87
	Female	140	26.17

Communication habits of students such as using the Internet to communicate with their peers and reasons of their communications were analyzed. Most of the students stated that they use the Internet to communicate with their peers.

For instance, 665 of them (432 males and 232 females) use the Internet to communicate with their classmates, but 492 them (169 males and 321 females) do not use Internet for communicate with their classmates.

It seems that males had more tendencies to use Internet to communicate with their peers. Using the Internet to communicate with classmates among students was not related with courses.

For instance, 427 students stated that they communicate about sport, daily news, taking help or music download. However, 275 of them state that they make conversations about their course subjects. Also, 167 students communicate with teachers via the Internet.

Awareness of the distance education is one of the main research questions of the present study. It was found that 377 students stated their school has no website or they did not know about it, although all schools participating to the study had a website.

Most of the students (n=837), on the other hand, were aware of their schools' website, but it is interesting that only 382 of them (239 males and 143 females) preferred to use school website for different aims. Students' habits and familiarity with reaching information about courses via the Internet were analyzed by asking them whether they can reach course content via the Internet. 584 of the students stated that they had access to course content, while 593 of them couldn't reach. 483 of these students who had no chance to access to the course content stated that they wanted to reach their course contents via the Internet.

Similarly, students were asked whether they want to take one of their courses via the Internet. Most of them (n= 703 students, 360 males and 342 females) had positive tendencies for taking course by e-learning. Only, 394 of the students (209 males and 185 females) had negative tendencies. The reasons of their preferences are listed in Table: 4.

**Table: 4**  
**Students' preferences about taking online courses**

Whether they want to take online courses	Reason	N
Yes	Easy, effective and fast	228
	Reaching more content	105
	Enhancing learning with	90
	Enjoyable	63
	Far from troubles of class (noise, sitting on desk)	39
No	Prejudice about	130
	Depending teacher	84
	Habit of classroom	62

According to the Table 4, most of the students (n=228), prefer to take courses via the Internet, thought that these kinds of courses are easy, effective and fast. 105 of the students stated that their course content is not enough and they wanted to reach more content, thus they expected from the Internet to reach more content. Similarly, because the Internet can be reachable always, and its flexible time characteristics, 90 of the students wanted to take online courses to enhance their learning by reaching course content whenever they want.

63 of the students stated that online courses are enjoyable and 39 of them saw Internet as an environment without interruptions that were encountered in classroom. On the other hand, 130 students did not want to take online courses, mostly because of not believing learning could be realized with technology.

Another reason why students did not want to take online courses was teacher dependency. 84 of the students stated that they could only learn from a teacher, so they did not want to take online courses. As a third reason, 62 students stated that classroom environment could only provide learning with social negotiation.

Students were asked which kinds of courses that they were taking at school were suitable to be given via Internet. Most of the students (n=308) stated that verbal courses were more suitable as an online course.

Also, 272 of the students saw vocational courses as suitable for being online, and 244 of them stated courses which are Mathematics, Physics, and Chemistry etc could be given via Internet. Although most of them stated that at least one course was suitable, 109 of them stated that no course they take at school can be given via Internet.

Although most of the students stated that they use the Internet for the educational aims and most of them wanted to take school courses via Internet, 560 of them (260 males and 300 females) did not know anything about what the meaning of distance education is. In addition, 291 of students (166 males and 125 females) gave partial definitions. However, only 378 of them gave definitions about distance education and they gave an example of distance education. Examples of the students about distance education were reflecting their expectations and awareness from this form of education.

For instance, 239 students (203 males and 175 females) stated that distance education means Internet-based education or e-learning. Because of the technological developments, majority of the students expected to use computer and Internet technologies in distance education applications.

Also, 98 of the students explained education as an education which is given Open University in Turkey and only 17 of them stated distance education by the computer based education by using CDs. Some misconceptions were available between students such as considering distance education as "using Internet to search information", or "computer mediated courses". Most of the students (n=552) stated that Internet and computer are as distance education tools, 106 of the students stated that TV as a distance education tool, 17 of the students stated that radio is as a distance education tool and 11 of them stated that books are distance education tool.

Reasons such as curiosity about the university environment, taking a good education from a good university and living in a different city for education might be attractive for high school students; therefore, majority of them do not want to take their university education with distance education.

Results of the study revealed that 257 of the students (163 males and 94 females) want to enroll distance education program, while 700 of them (350 males and 350 females) do not want it.

The reasons underlying their enthusiasm are mostly related to environmental reasons. For instance, 89 of them want to take opportunities of distance learning in terms of flexibility of time and place.

Another reasons are that not to go far from home (n=26) and to get bored from classroom environment (n=11).

Reasons of unwillingness of distance learning are mostly related to the quality of formal education. 138 of the students stated that face-to-face education is more effective and enjoyable, 110 of the students stated that they wonder about university environment, 68 of the students stated that distance education is not suitable for themselves and 46 of the students stated that they do not trust quality and yield of distance learning (Table 5).

**Table: 5**  
**Students' preferences about distance education for university education**

Whether they want to take distance education for university education	Reason	N
Yes	Good opportunities of distance	89
	Unwillingness to go far from home	26
	Disliking classroom environment	11
No	Finding face-to-face education	13
	Curiosity about the university	11
	Thinking themselves suitable for	68
	Not trusting the quality of distance education	46

839 students (438 males and 401 females) emphasized that classroom learning is more advantageous because of the social environment, interaction, fast feedback and fast answer during the education.

255 students (135 males and 120 females) emphasized that learning via the Internet is advantageous because of the disruptive nature of classroom.

They also believe that Internet has lots of truth information. Lastly, students were asked whether they see themselves having competency to be distance learner. Only 182 of them (104 males and 78 females) have self-esteem about being distance learner.

Because of the reason of being competent of technological familiarity, these students see themselves as a competent for distance learning.

But students who are not competent in computer and Internet and having habits of learning with their friends do not feel that they can do better in distance education settings.

## **CONCLUSION AND DISCUSSION**

**Quality of the distance education depends on several factors or dynamics such as meeting students' considerations, expectations, awaking of their awareness, and understanding their preferences etc.**

**In order to enhance the quality of distance education, first step should be to analyze considerations, expectations and reasons that underlie these expectations.**

**Therefore, this study aimed to investigate Turkish high school students' considerations, expectations and awareness concerning distance education, especially e-learning, and its implementations.**

**It was revealed that because of the technological developments and students' familiarities of computer and Internet technologies, majority of the students gave their answers by considering Internet-based learning or e-learning as a context of distance education.**

**Majority of the students couldn't give any definitions or examples related to distance education.**

**This might be caused from the lack of well-known e-learning programs or lack of their interest for e-learning opportunities. Students have some prejudices and misconceptions about distance education. For instance, most of the students considered distance education only as an online learning or taking any information from the Internet.**

**Moreover, computer mediated courses or courses that use computers for the educational materials were considered distance education by some of the students. Very few numbers of students gave correct explanations and examples of distance education.**

**These students stated that apart from the Internet and its applications, TV, books, radio, CD and other materials might be used for distance education programs.**

**Students' lack of awareness related distance learning might be caused from thought of no need of life-long learning and they might not think they might need to improve their careers in future.**

**Barriball et.al, (1992) suggest that important thing is improving learners awareness about their need of practice and their need of continuous education by lifelong learning. Therefore, students might be informed about the opportunity and need of lifelong learning.**

**According to the results, almost all students adopted using computer and Internet and most of them had these opportunities at home. They thought that competencies of technology were the basic criteria of being a distance learner. Although they had these competencies, they did not want to take any distance education program for university education.**

**Thus, it might be said that being familiar with technological developments might not an effective factor in terms of preferring a distance education program. Also, these technologies might not eliminate trust and dependency of traditional education because of some beliefs about distance education.**

Majority of the high school students did not prefer to attend distance education programs because of several reasons such as importance and effectiveness of face-to-face instruction, social nature of classrooms, teacher dependency and attractiveness of university environment. Apart from expectations, the situation of available programs in Turkey might influence students' answers.

In Turkey, dominant opinion about finding a good job is associated to graduating from a good formal university.

According to the quality e-learning model Holsapple and Lee-Post (2006), puts recommendations of experienced students in online-learning to prospective students are indicator of satisfaction. In this case due to the dominant opinions of distance education programs which do not provide equal quality like formal educational programs, students did not want to take whole of their education in distance education programs.

Although students do not want to have a degree with distance education, they had positive tendencies about taking some of their courses via Internet due to flexible time and place allowance of the Internet. Another reason why students wanted to take online course was that they wanted to reach source of the course content without limitations and reaching lots of information related to their courses. The tendency of taking one course at their school might cause from their opinions about the kind and content of the courses.

For instance, most of the students thought that verbal courses such as Literacy, History, and Geography are suitable for online courses. Less number of students preferred vocational or numerical courses. Thus, these kinds of preferences might be one of the important reasons why they don't want to take whole of their education by taking online programs. It can be said that the nature of the course and course content have a great influence on preferences of online learning.

If qualities of online courses meet all requirements of these kinds of courses, students' preferences might be changed from limited number of the courses to whole educational programs. According to Hall and LeCavalier (2000) there must be systematic and strategic approach to provide individual learners, organizations and decision makers to understand the potentials of e-learning.

Most of the students have a computer at home with an Internet access opportunity. They mostly use the Internet to access information and doing homework. They communicate with their peers and their teachers for courses they take. Most of them are aware of their school website and some of these websites have course related resources, some students facilitate these resources.

Other students have no opportunity of reaching course resources want to reach via the Internet.

Most of them do not aware of distance education opportunities and they do not ready for taking distance education for university education for several reasons as mentioned before.

Oliver (2001) states that technological competency takes very big role to determining the readiness of students as a quality issue of online learning. Miller (2005) supports Oliver with a study of which results showed that students mostly concern about technology issues in e-learning. In our case students felt themselves suitable as distance learner because of their technological competency. However, they show low desire to online learning for all educational setting.

Especially students' adoption of classroom environment plays key role underlying this issue.

For this reason, it seems that familiarity of technology and using them for educational aims is not enough to improve the students' desire for distance education. Therefore, it would be beneficial to adopt students to use technologies in education in formal education.

Before determining the quality standards of distance education, especially e-learning, students' considerations expectations and awareness should be taken into account.

These factors or dynamics reveal that students want to get fast feedback, fast answers about course context, and effective guidance of facilitator, broad content, more social interaction and communication opportunities. While designing quality e-learning, designers should take into consideration classroom environments and students expectations from both traditional and online courses as a model in order to provide improvement of demands of students who have no experiences with e-learning.

There are lots of studies related students perceptions and opinions of e-learning, however before experiencing distance learning, students' opinions and perceptions might shape the quality issues and e-learning and distance education programs might use different strategies to attract students.

Therefore there is a need for different studies which observing other inexperienced target groups' opinions related life long learning and distance education programs to improve different programs related that target groups.



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