An Assessment of Web Based Distance Education Course: According to Eastern Mediterranean University, Faculty of Architecture Students

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ABSTRACT

In this study, a survey has been implemented on the distance education program carried out over the internet and usage at education. In the research a set of question has been prepared for the students who take distance education. At the questionnaire, several questions have been asked to the students about general evaluation of distance education, comparison with face to face education, advantage and disadvantage, importance of distance education and web based laboratory. The questionnaires answered by students have been transferred to the computer in which they have been analyzed statistically by using SPSS data analyzing program. The questionnaires have been applied to 48 students at Department of Architecture at Eastern Mediterranean University. As a result, feed backs coming from the students have been evaluated and some recommendations have been proposed in order to eliminate stated weakness and to improve education quality.

Keywords: Distance Education, Web Based Distance Education.

ÖZ

Bu çalışmada, internet üzerinden yürütülen uzaktan eğitim programları üzerine bir araştırma yapılmıştır. Araştırmada lisans düzeyinde uzaktan eğitim alan öğrencilere yönelik bir anket kullanılmıştır. Anket çalışmasında öğrencilere uzaktan eğitimin genel bir değerlendirmesi, yüz yüze eğitimle karşılaştırılması, avantajlar ve dezavantajları, uzaktan eğitimin önemi ve web tabanlı laboratuar uygulamaları ile ilgili sorular yöneltilmiş ve değerlendirmeleri istenmiştir. Öğrenciler tarafından cevaplanan anketler bilgisayar ortamına aktarılarak SPSS veri analiz programı yardımıyla anketin istatiksel analizi yapılmıştır. Anketler, Doğu Akdeniz Üniversitesi, Mimarlık Fakültesi, Mimarlık Bölümünde 48 öğrenciye uygulanmıştır. Çalışmanın sonucunda öğrencilerden gelen geri bildirimler değerlendirilerek, tespit edilen zayıflıkların giderilmesine ve eğitim kalitesinin iyileştirilmesine yönelik önerilerde bulunulmuştur.

Anahtar Kelimeler: Uzaktan Eğitim, Web Tabanlı Uzaktan Eğitim.

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Chapter 1

INTRODUCTION

There are rapid changes in the field of information technology. Unfortunately some countries are not capable of the new technologies in IT. They are not aware of these changes and they are an economic burden, while others are in the position of being economic superpowers estimated in the time of these changes and developments. Today, almost all countries, especially the developed countries, want to benefit more from the power of information. Even countries that have noticed the power of information later on have now become aware of this power and they are making plans with their existing powers to question the existing systems in order to make improvements. The whole world now understands that knowledge and human resources are more important, instead of money and natural resources, in order to secure the richness of countries and their future. The only way to increase human power is by education and training. The phenomenon of education has been handled from the past on the basis of common sense rather than a scientific approach.

Education has been more concerned with the settlement and adoption than the change of ideas. In this environment, mechanisms based on mechanization have been replaced by information technology (Karaduman and Mencet, 2013).

Where almost every problem is discussed, the insufficiency of education is referred to and education services are being criticized. In fact, it cannot be said that the

problem arises from the distribution of service. Since education deals with all sociocultural phenomena that are effective for all individuals and the life of an individual, from birth to death, the field of use needs to be further expanded. Education is not the preparation for life, but is the life itself. In this identity, education is a process that provides a life direction and gives a way to the life style (Erdem and Gözüküçük, 2013). It can be emphasized that education is an important part of human life by stating that production is needed to live, information is needed for production and education is needed for information. What is important here is that people need to be educated and able to access the information which is necessary for their survival. From this point of view, the effect of distance education system is too much to ignore in our life. For this reasons, the desire for change, which has gained importance in the learning process, has begun to make itself evident on educational systems. Thus, a variety of teaching systems have emerged, from traditional education to freshman teaching (Demiray et al, 2008). The fundamental concern in education is how classical educational institutions will adopt to the increasing changes in the education environment. The aim of mobile teaching is to shift the fixed education system into flexible virtual education environments (Yuen, Wang, 2004).

To see the difference between distance learning and e-learning concepts, the features that these concepts bring to the fore should be looked at. Distance education is independent of time and space. Education process is carried out on the basis that the student and the teacher communicate with letter, radio, TV, computer, internet, etc. E-learning is a concept that changes its scope by acquiring different meanings over time. At the beginning of the 2000s, e-learning was defined as teaching process which was distributed using technologies such as CD and internet to aim at

improving learning and performance. Although e-learning definitions include learning processes and performance improvement in these years, the use of communication tools such as computers and the Internet has become the main emphasis in learning (Clark and Mayer, 2011).

Emerging information technology has introduced e-learning concepts along with distance education concept. People can learn without going to school with e-learning. Those who live far away from the school have the opportunity to learn without having to leave their current locations, for the reasons such as work, health, family. According to a research result, E-learning contributes 50% to success (Çoban, 2012). For this reason, e-learning is much more effective than other one-way passive learning methods (Akça and Aydoğan, 2015). There is a growing interest in online learning around the world (Elango, Gudep, Selvam, 2008). Electronic learning (e-learning) plays a major role not only in academic institutions but also in small and medium-sized enterprises, which are constantly renewing their knowledge and vision. E-learning also provides practical solutions to students who have not been trained before (Roy, Raymond, 2008). In e-learning, scientists focus on interaction, personalization and control (Piccoli, Ahmad, Ives, 2001). In particular, an e-learning program or environment should be designed for all students in harmony with different objects and past experiences, and their own activities should be enhanced (Hodges, 2004).

The point that we should draw attention to, in terms of our country, is that although the unemployment rates are increasing, the qualified workforce is inadequate. Distance education needs to be supported in terms of needs, institutional and financial aspects (Clark and Mayer, 2011). When distance education is supported and

distance training is applied effectively and vocational and technical training is given to working or non-vocational educated individuals, it can be ensured that the individuals working in the job areas become more qualified and also the job seeking individuals turn into qualified members in a certain profession. Even those who are in prison can return to their social lives as qualified members at the end of their time in prisons if the adequate facilities are available for distance education. Distance education at this point can serve both to solve the problem of unemployment and to eliminate the needs of qualified personnel.

Web based education is used for web based synchronous and asynchronous distance education model. Web based education is classified as synchronous or asynchronous according to communication style. Synchronous education is a model in which the teacher and the student interact simultaneously in physically different environments. Asynchronous training is a communication model independent of time and space, where course content is prepared in advance and delivered to students through the internet (Yorgancı, 2014).

The tools used by students to express their designs have also changed with the participation of computers and communication technologies in the architectural design process. It is the use of digital technologies as an aid in visualizing the design process, while the traditional form of expression cannot be abandoned in the education process. For this reason, there is a mixed educational process in which traditional and digital technologies are used together (Yıldırım et al, 2010).

Distance education is not possible with traditional methods in architectural education. But with the help of using digital technologies, distance education is possible because of electronic communication networks (Yıldırım et al, 2010).

There is no enough study in this field especially in North Cyprus. I believe that there is need for this study.

1.1 Purpose of the Study

The main aim of this study is an assessment of students' opinions about use of web based distance education.

1.2 Research Questions

1.2.1 What are the assessment of students' about general evaluation of distance education architecture course?

1.2.1.1 Is there any relation between gender and students assessment about general evaluation of distance education architecture course?

1.2.2 What are the assessment of students' about advantages of distance education architecture course?

1.2.2.1 Is there any relation between gender and students assessment about advantages of distance education architecture course?

1.2.3 What are the assessment of students' about disadvantages of distance education architecture course?

1.2.3.1 Is there any relation between gender and students assessment about disadvantages of distance education architecture course?

1.2.4 What are the assessment of students' about importance of distance education architecture course?

1.2.4.1 Is there any relation between gender and students assessment about importance of distance education architecture course?

1.3 Importance of the Study

There are limited number of studies in this field. This study will shed light on future study.

1.4 Limitations

Various limitations have been made in order to ensure that the research is carried out in a healthy manner and to achieve the determined objectives. These limitations in the research are explained below.

1. The research is limited to programs implemented at the Faculty of Architecture at Eastern Mediterranean University in Gazimağusa, North Cyprus.

2. This research covers 48 students who took Cyprus History and Culture course as a distance education in 2016-2017.

Chapter 2

LITERATURE REVIEW

2.1 Distance Education

Developments in information and communication technologies have led to the emergence of a new paradigm of education. Education is no longer limited to schools alone. The constant increase in the amount of information that needs to be learned reveals to the concept of lifelong learning. In this respect, the need for individuals, who have completed their basic education in organized educational institutions, to continue their learning experiences in the rest of their lives has increased the importance of distance education practices (Başarıcı, 2012). The transition to the information age has increased the amount of information that needs to be learned, as well as constantly changing and updating information structures. In addition, time constraints and geographical obstacles are increasing day by day resulting with the need for distance education. Thanks to the development of information and communication technologies, problems arising from time and space are being reduced and this makes the quality of distance education good in many respects. The most important goal of distance education is to ensure that large communities receive their education anywhere they want. It is thus possible to create a flexible education system so that learners can repeat what they learn as much as they prefer. Distance education aims to provide equal opportunities by providing education to individuals who cannot benefit from traditional education due to social, economical and geographical reasons as well as providing access without time and space limitations.

While distance education has different advantages on the one hand, and on the other hand, the technologies that it uses are constantly developing, but have some limitations (West et al, 2013).

In traditional education, there are some difficulties in educating and informing people. One of the difficulties in Turkey is distance and inadequate capacity of educational institutions. These difficulties stem from the shortage of our educational institutions, and teaching staff due to lack of space. In addition, those who have jobs, family, responsibilities and are above the average age compared to classical education students are deprived of these educational services.

Non-traditional education, non-traditional learning, independent study, out-of-school education and similar terms have been proposed and used in defining distance education. Features that distinguish distance education from academy education are (Naidu, 2013):

a) In the majority of the teaching period, the geographical separation of teachers and students,
b) The effect of the training organization, including the provision of student assessment,
c) The use of the training media to combine the teacher and the student,
d) Providing two-way communication between teacher and bellet or education representative and student,
e) The use of the training environment to bring together instructor, student and course content,
f) Provision of independence in time and place,

g) The learning of the teacher by his own will without being under the influence of the instructor,
h) Variable course durations are in accordance with the individual.
i) Individuals who receive training can take these trainings in synchronous and asynchronous modes.
j) The distance education system is an effective means of providing continuous education.

In order to have the right to practice many professions at our age we need to graduate from college or university programs related to that profession. However, we must continuously develop and update their professional knowledge so that individuals can continue their profession effectively and successfully. It is not always possible and it is time-consuming for them to participate in a development / update training. Therefore; such training and certification programs are most efficiently provided through the distance education system. This type of education is defined by the name of life-long education, which is one of the education systems that distance education includes. Through distance education, many training programs can provide personal, professional and cultural development for the individual, such as high school, college, undergraduate, graduate, language education, vocational or non-vocational certificate programs (Shearer, 2015).

Distance education focuses on collaborative, individual and active learning, where the educator is more of a guide rather than an information transferor. Distance education supports both pupils and teachers with effective means of reaching out to resources in digital schools without walls. These new methods of continuing

education require knowledge of the perceived levels of active participants in order to develop effective distance education (Hart, 2012).

Distance education is an education in which individuals are provided the opportunity to learn on their own, which is more flexible than traditional education, and applicable to individual conditions. By means of distance education, it is aimed to reach to broader educational opportunities by eliminating the limitations to carry out the education service for the individual partly or completely. Job provisioning of multimedia devices and presentation systems makes it difficult to define distance education. However, in short, all educational practices structured on the environment where the teacher and the student are separated from each other in terms of time and space are all called distance education (Moore and Kearsley, 2012).

The development of distance education in the present sense has been fascinating in recent years. Distance education has been developed in many countries to provide education at all levels, to reduce the cost of education in the industry, schools and academia, to reach the broad masses in geographically distant regions, to allow students to be physically unable to learn in the learning environment and to enable learners to learn at their own individual learning speed, which emphasizes the dialectical relationship between teacher and student, independent of time and space (Hart, 2012).

California Distance Learning Project (CDLP) defines distance education as: "The distance education program is a system that provides education by linking the student with the educational resources, and the fact that the distance education programs provide educational opportunities for the persons who are not enrolled in any

educational institutions, "One aspect of the distance education program is that it is making good use of available resources and that it has to follow up on emerging technology" (California Distance Learning Project, 2014).

The United States Distance Learning Association (USDLA) defines distance learning in two different ways. The first definition is to acquire the knowledge and skills that are directly related to distance education and teaching, supported by technology and other distance learning forms. The second definition is that "Instructional content is to be delivered to distant students with the aid of electronic tools such as satellite, video, audio graphics, computer, multimedia technology, etc. USDLA states that the teacher and the student are geographically distant from each other and this education program includes electronic tools or printed materials "Distance education consists of two main parts: teaching by teachers and learning by students" (United States Distance Learning Association, 2014).

The Western Association of Educational Telecommunications Organizations (WICHE) describes distance education as follows. Distance education is a teaching system that can remove time, space, or both constraints from the teacher and the student (WICHE Cooperative for Educational Technologies, 2014).

According to another definition, distant education is a planned learning that is normally carried out in different contexts, with special teaching methods, special communication methods using electronic systems or non-teaching systems, as well as the construction of special organizations and applications.

Moore and Kearsley (2012) defined distance education as a process of learning and teaching that is taught and planned by a private institution in a way that teachers and learners are in different places and communicates using technology.

Distance education is the way in which learners and educational resources in different environments communicate with each other in a way that will create a sense of classroom environment using technological opportunities. With this definition, it is possible to understand why distant education systems have different characteristics from traditional education systems. It is necessary to say that in the classical form of education, the trainer and the students share the same environment in predetermined places, according to the curriculum, while the instructors and the students in the remote education form are in independent environments and there is no time restriction (Shearer, 2015).

Communication and interaction between planners and practitioners of learning activities and learners, where classroom activities are not feasible due to limited traditional learning-teaching methods, is a teaching method provided from a specific center through specially prepared teaching units and various settings (Farmahini, 2012).

As it can be seen, the definitions related to distance education are similar in terms of some features. When a common definition is set out from the above definitions, it is not necessary to mention this definition; it will be understood that there will be a learning-teaching process in an individual sense without institutionalism as well as time and space independence. Today, with the rapid development of technology and the widespread use of online applications, it is possible to sacrifice time

independence especially in the near future (Umurhan 2014). In brief, when the definitions related to distance education are examined, it is seen that the teachers and learners are independent of space but against time; Dependent, independent or semi-dependent manner through various means of communication (Hart, 2012).

Distance education is defined as a form of teaching with specific communication methods through which specific teaching techniques are applied through various mediums through specific organizations. In this direction distance education can be considered as a teaching method involving individual, flexible and independent learning situations where teacher and student interaction are realized by different techniques (West et al, 2013).

In parallel to the developments in internet and information technologies in the recent years, distance education systems have shifted to the web environment. Distance education is provided through the use of all kinds of internet tools (web, e-mail, discussion groups, message boards, chat programs, tele-conferencing) to provide education in case the teachers and students are not in the same geographical environment. By using web in distance education, learning environments can be equipped with student-centered and rich teaching materials (picture, video, flash animation, etc.) to provide more interaction and communication between the teacher and the learner. Distance education according to application forms are examined in three groups as Concurrent (Synchronous), Asynchronous (Asynchronous) and Mixed training (Shearer, 2015).

The basic hypotheses of distance learning are:

a) Organized learning can take place without a teacher or tutor. Internal motivation, learning is one of the most important conditions. Learning is supported when the topics are adapted to existing cognitive structures of learners.
b) Behavior in working situations and sincerity in human relations help emotional engagement. Emotional participation in work supports attaining goals and learning profoundly.
c) The feeling of friendly relationship with instructors, consultants and supportive organizations usually support and strengthen both work enjoyment and work motivation. Mental pleasure; deep learning, problem-oriented working processes and achieving working goals.
d) Participation; Taking responsibility of attaining the goals of the work, considering the work plans and goals that are encouraged by personal interests to learn.
e) Learning is often supported by helping communication that arouses the curiosity of others during work. Maturity; Instinctual balance creates the ability to become independent and to have the power to overcome the fundamental challenges that do not overlap with many tendencies or aspirations.

In distance education, three kinds of interactions can be mentioned when looking at the roles of students and teachers. Those are; Student - content interaction, student - teacher interaction, and student - student interaction. Virtual learning environments that allow students to create their own learning plans, select materials and exams provide some guidance that allows students to communicate with the instructor and

reach the necessary chat messages. Through online lessons, students can communicate with teachers and other students in different ways and participate in lessons from any part of the world, within a time frame appropriate to their own schedule. The interaction between the student and the teaching staff is necessary in order to increase the quality of the discussion in the classroom (Hart, 2012).

Teaching of theoretical courses has been successfully carried out for many years with the non-simultaneous education model. Educational institutions that are beginning to provide non-simultaneous education at secondary and high school level; With the development of technology, have formed units providing distance education services at the level of associate degree, undergraduate and graduate level (Farmahini, 2012).

Some of the advantages provided by distance education are as follows (Shearer, 2013):

a) The reduction of in equal opportunity by providing a certain balance in the education process,
b) Beyond a text-only presentation, it includes elements such as sound, color, graphics, animation, as well as structures that appeal to and interact with visual and auditory senses,
c) The possibility to create unlimited and indefinite education with the opportunity of learning independent of time and place,
d) By enabling the desired time and speed, realizing the individual teaching,
e) The fact that education can be carried out individually from one side and massively from the other,
f) Because the content can be easily updated, it is possible to continuously present the most updated information,

g) Providing the opportunity to access from the source of information,

h) To ensure that education is maintained on the basis of information technology,

i) To provide suitable environments for the realization of a multi-faceted communication between student-educator and student-student,

j) In the traditional classroom environment, students who cannot ask questions or who cannot participate in the group have the opportunity to gain confidence in the virtual environment,

k) To show instructional consistency by making course presentations independent from environment, student, educator and other environmental conditions,

l) To increase the interest by providing individual participation and mutual interaction,

m) To provide appropriate environments for individuals to manage their own time,

n) In addition to the infrastructural differences observed in fields such as communication and transportation, democratization of education by reducing the effects of cultural and social level differences,

o) The costs of traveling, accommodation and the loss of production during the travel of the people have been neglected and accordingly the cost of learning has decreased in terms of the individual,

p) It is possible to provide groups of individuals with different characteristics and possibilities in different places as venues with virtual interaction environments and to share the different aspects of group members',

q) It is the sharing of the resources in the virtual environment by allowing the group discussions to be carried out effectively through the internet services.

This learning program with such advantages can also bring with it a number of disadvantages (Shearer, 2013):

a) The continuous technological developments leads to the difficulty to update the technical infrastructure at the latest developments level,
b) The necessity of computer and internet usage (computer literacy, e-literacy) is necessary for the students to be successful in the WTE environment,
c) The inability to be effective in the performance of skills and attitudes towards retention,
d) To create limitations for students who are not self-employed and have not developed this ability,
e) Inadequate use of practical courses,
f) To limit the socialization of students,
g) The fact that students (especially young students) can make it difficult to distinguish between the living and the inanimate, can cause emotional underground blindness and push them to loneliness,
h) The necessary technical infrastructure is costly in terms of budget,
i) Students are not allowed to take advantage of the school and classroom atmosphere,
j) The intention of the students to concentrate on the very technology,
k) Communication facilities may change for any reason, or inability to communicate effectively due to the inability of Internet facilities to be

improved, resulting in the inability to find solutions to immediate questions and problems.

Although there are limitations in the distance education system structure, the usage rate is increasing day by day and becoming more widespread. This is because of the solution to some problems in the existing education systems and the solution to the inequality of opportunity by reaching an inaccessible group (Umurhan 2014).

2.1.1 History of Distance Education

The best-known common feature of all distant learning models emerging within the historical development process is that they are designed independently of time and space conditions for users. To compare with the classical education systems, education in distant education systems are entirely possible with studies that the student has performed on their own in a remote and isolated environment, while the instructor and the student perform the education physically in the classroom environment with the help of face to face relationships. Thus, the refined environment, which is the decisive feature of distance education, lacks physical and face relations, is the most important factor playing a role in shaping the general structure of remote education models and tools (Shearer, 2015).

In the beginning, the distance education model, has aimed to teach the information in the simplest form, that was done by delivering letters or printed documents to the user, is realized in "zoomed" environments where the education is established on the virtual campuses with the aid of the advanced technology at the point reached today and used effectively in the virtual classrooms. This positively affects the success of

the student, the speed, quality and relational structure of the student (Simonson et al, 2014).

With the dissemination of Internet technologies in the new distance education model, distance education becomes a phenomenon closer to real life, away from reality. Although the physical distance still preserves its existence, the real 'learning space' between the students is getting closer. Communication and interaction in the classroom are much more active than they are in the real, large class in the traditional education system, given that ideas cannot be discussed very frequently and comfortably. In addition to this, only internet and network use carry faraway education from an objective approach to a constructive neighborhood (Zawacki-Richter and Anderson, 2014).

For this reason, the concept of distance education and its applications have been investigated in depth in parallel with the skepticism, which has been constantly compared with classical education systems by some circles since its discovery. Numerous scientific researches and studies have been carried out for this purpose. When distance education is considered over a period of ten years, the perception that it is a system that is compatible with information and communication technologies is at an acceptable level (Farmahini, 2012).

The first thing that comes to mind when you call distance education; Internet, computer and similar technologies. In this sense, the concept of distance education is understood through the blending of internet and computer technologies and being in communication with individuals. But it is also known that the concept of distance education has long been used as a term. Even though we are linking distance

education with ICT today, it is understood that it has been named in the times when there is no technology in the past and that it is in the education system by being passed on in its own structure (Simonson et al, 2014).

The foundation of distance education is based on the establishment of printing houses. Before publishing houses, all resources could be written and handed out, and only certain people, mostly clergy, could benefit from them. By inventing Gutenberg's printing press, all the resources are now multiplied quickly and the social class and sex are dissimilar. This invention has caused a great explosion of information in the world. As the sunlight gets closer, the second information explosion emerges as the result of technological developments. Despite the increasing amount of information that has been generated by the development of technology, people have searched for ways to access information. It has been understood that the most robust way of accessing information is "education" and the need for training has increased (Farmahini, 2012).

Distance education has begun to be widely applied today through the effects of technological developments through various stages. The concept of distance education first appeared in the 1700s and was used for English language training. The first example was done with a letter. "II. In the aftermath of World War II, the distance education system gained prominence and importance in order to increase the level of education of the countries. The first applications in this area were found in countries like England, USA, Germany (Zawacki-Richter and Anderson, 2014).

In the nineteenth century in the United States, it was encouraged to spread adult education from the university organization to the campus through various activities.

In 1873, Anna Ticknor founded a community that encourages in-home education to create educational opportunities for women of all classes in the community. This Boston-based community has provided open instruction with 10,000 members in a 24-year effort, largely based on voluntary efforts. In 1883, a letter from the central Cornell University established an open teaching university, but did not stand on its own feet. The open teaching was first officially recognized by the Chautauqua College of Humanities. Students who have successfully completed their studies in the summer institute through this college, letter by the state of New York have been given the authority to grant academic grades. When compared with traditional education, the issue of how efficient the open teaching by letter is the subject of various discussions and disagreements. William Rainy, a Hebrew professor at Yale University, who is authorized to give academic degrees to students who have completed letter-training, believes that "learning by letter cannot take place in verbal education and cannot be regarded as his substitute." In Watkins's book, Vincent's "when the number of those who memorized with letters exceeded the number of verbal memorizing, It is the day when our academies and colleges in our classrooms will be made through letters that are much more structured than they are structured " (Simonson et al, 2014)

The results of the University of Chicago's 1933 faculty survey indicate that the justification of the letter training should be proven on an empirical basis, by producing innovations that will improve the educational technology. This research is very important in terms of knowledge base in this area. While the dominant communication system is 40 years old, new communication systems and new options have begun to be offered along with letter training. Pittman stated that during the period of 1910-1920, the repertoire of many education extension units included new

visual education materials, including dialers and visual materials, and the most promising new technology apart from letters and training is radio education.

During the years between World Wars (1918-1946), the federal government issued licenses for radio broadcasting to 202 colleges, universities and schools. Despite the demand for radio education and the increase in popularity, there was only one college program left by radio in 1940, and this program failed in the collective. In the middle of the 20th century, the main reason for the development of education on television was the concept of education on radio. With each passing day, the number of associations dealing with distance education increased and new social support programs were developed. Packing companies, railways, American Banks Association, trade unions, army, navy, state and institutional welfare agencies are well aware of the benefits of open / distance education. With the increasing need and popularity of distance education, new questions such as the characteristics of learners, the needs of learners, the effectiveness of communication and the value of outcomes have become new topics of interest when compared with the face-to-face education. The reason for the many new researches that contributed to the increase in the distribution of information on distance education was also interesting to find answers to these questions. Clark Melody "Since Thorndike proposed the use of pictures as a means of saving labor in education, research into improving education using media tools has become part of educational research." In response to the needs during the war, the education dissemination programs have also started to provide short programs and refresher trainings in addition to various technical and mechanical opportunities. II. After World War II, television, another option for presenting distance education, has come to the forefront (Simonson et al, 2014).

The first Open University in the United States is Empire State College in New York, which started in 1971. One of the main goals of the college is to make higher education ratings more accessible to students who cannot attend traditional programs and campus-based programs. The program at the college has changed the concept of academic credits and has provided flexibility in terms of academic grade esters and time constraints when compared to the qualifications of traditional academic degree programs. The main concern of the leaders in this area is to provide a direction for the progress of research activities in distance education. Two of the key players in the progression of academic research were Charles Wedemeyer of Wisconsin University and Gayle Childs of Nebraska University. Wedemeyer and Childs have made important contributions to the development of a distance education profession. Both played important roles in the advancement of distance education research. During the 1950s, 1960s and 1970s, they were recognized as leaders of action. Wedemeyer and Childs not only provided the leadership needed by distance education programs for their universities, but also led to the development of this teaching and learning method at national and international level. Both scientists have made important contributions to the distance education studies section of the National University Education Dissemination Association and conferences on distance education. Wedemeyer and Childs' articles on distance learning studies, books and films have been valuable resources for the development of distance learning process design and distance learning and learning (Zawacki-Richter and Anderson, 2014).

Distance education first emerged as a system that removed the limitations between learning, teaching and learning resources, especially since the 1820s, and has entered

the mainstream of education with the start of the establishment of open universities in the 1970s (Shearer, 2015).

Distance education was first described as "Winconsin University's 1892 catalog at conceptual level, by William Lighty, director of the University. According to this definition, distance education is a planned, designed comprehensive learning activity that provides users with a variety of learning activities that remove the boundaries of time and space by implementing special communication methods through electronic or non-electronic systems (West et al, 2013).

2.1.2 Distance Education in the World

"The first change in distance education began with the establishment of a home improvement incentive in Boston in America. In 1883, Correspondence University was established and the teaching of letters was progressed. "The first educational radio broadcast was broadcasted on November 2, 1920 in the U.S.A. Again, educational films and television were first used for educational purposes in the United States. This use began and spread with the preference of educational films by religious institutions. "It is estimated that since 1890, 130 million Americans have participated in the distance education program. In 2000, the e-learning market in the US reached a size of $ 2.3 billion. This market has an annual growth rate of 50%. "(Zawacki-Richter and Anderson, 2014).

After the mid-1980s in the US, the two-way visual interaction between teacher-student and student-student, such as satellite video conferencing and fiber optic communication, has accelerated the development of modern distance education with favorable technological advances. The primary objective of the SERC (Satellite

Educational Resources Consortium), which provides the first use of satellite education services in the US in general, serves the basic education needs of teachers and students in schools with low income levels and geographical obstacles to the delivery of the education system (Moore and Kearsley, 2012).

The United Kingdom received the Open University patent in 1969 and began its teaching activities in January 1971. The Open University of the UK offers a full-time, but graduate-level education for those who are at home. Open University courses are based on the credit system and use a variety of tools in teaching. Among these tools, communication materials, television and radio programs, serial books and specially prepared texts are especially important for each course. Other instruments are plaques, pre-recorded tapes, and experimental equipments for "home".

The Open University is a university with a similar structure to other British universities, offering independent undergraduate studies. Education at Open University is provided through publications. University study centers have been set up for those who cannot reach the publications, and anyone who requests has been given the chance to participate. The Open University meets a great need throughout the country and provides a highly specialized education in terms of the method used (Moore and Kearsley, 2012).

In Germany, distance education programs mainly carried out by the public are aimed especially for the foreigners in the country to learn German well. Besides, Fern University Hagen also provides training in law, economics, education and social sciences. Trainings have become as widespread as printed materials, audio cassettes

and television broadcasts, computer-aided instructional software and internets. In addition, visually handicapped people with obstacles, such as distance education applications are given the opportunity to complete higher education. More than 80% of the population who prefer distance education is over 25 years old. Fern University offers undergraduate, graduate and continuing education programs and special courses. This university has also offered distance education for areas such as German, economics and engineering (Simonson et al, 2014).

At the end of the 1800s, the "Letter Writing Lecture" course was published in the Swedish newspaper. In Paris, "Ecole Universelle par Correspondence (1907)" and "Center National d'Enseigment par Correspondence (1939)" are distance education organizations. There are examples of applications in universities and colleges in Russia. "University of Air" was established in 1986 under the established distance education system in Japan.

In 1914, "Letters Education System" was established and joined the distance education system in Australia. "Distance education was initiated in 1910 with the University of Queensland at the higher education level. In Spain, the National Distance Learning University was established in 1972. In addition, countries such as Canada, India, Israel, Italy, and Poland have developed and implemented exemplary distance education projects." (Moore and Kearsley, 2012).

John Daniel named open universities with more than a hundred students as large universities. In 1999, millions of students (including Anadolu University) were able to find higher education in 11 universities in terms of the number of students. Teaching staff and students at universities such as National Technological University

(NTU) come together in class with satellite or audio connection and come up with a two-way image. The remote controlled class is one of the applications, we have been discussing and participating in the distance learning course by connecting students to the classical classroom with face to face lessons. Online universities such as Kennedy Western University and Jones International University provide independent training in time, space and distance by utilizing the communication and interaction facilities provided by computers, networks and especially the internet (Moore and Kearsley, 2012).

2.1.3 Distance Education in the Turkish Republic of Northern Cyprus

The history of distance education applications in Turkish Republic of Northern Cyprus Show parallelism with the ones in Turkish Republic. In the websites of "National Education and Culture Ministry", there was a mission statement as "At every stage of education, it is ensured that students benefit from the new training methods that distance learning and advanced technology, especially using computer technology, possibilities provided by technology" (TEPAV, 2012).

Eastern Mediterranean University is one of the leading institution that started using distance education. The university has started to provide services in the field of distance education through special software and systems that it has developed since 2000 (http://ww1.emu.edu.tr/tr/akademik/enstituler/uzaktan-egitim-enstitusu/643). The Distance Education Institute currently has three graduate programs approved by the Higher Education Council (YÖK). Currently, Girne American University (http://www.gau.edu.tr/akademik/uzaktan-egitim-merkezi-hakkinda) and Near East University (http://old.neu.edu.tr/tr/node/6529) have distance education services and they provide online courses and seminars for different purposes. These two

universities have started to their distance education activities in early 2010s. As seen, integration of distance education to higher education system in Cyprus started later in comparison to the Turkish examples.

2.2 Distance Education Methods

The emerging technology has been the new technological tools that have been provided to the use of people for the purpose of increasing the efficiency and success of distance education. Technologies that provide access, transportation, communication especially to audiovisual, visual, wireless and remote locations; Allows students to easily access course materials, teachers, classmates, and lessons that will be presented simultaneously or non-synchronously.

Especially in the recent years, the widespread use of technological products and the acceleration of technological developments have led to the widespread, accessible and cheapness of such tools. In the 1980s and 1990s, the use of computer and computer-related devices was regarded as a luxury in the general human experience and in the delivery of distance education and training programs, and today these technologies are already in place at a significant segment of the population; therefore, a distance learning student does not have to take such technological equipment only because of education (Chang, 2005).

According to İşman (2011), the historical development of distance education has been examined at five different stages. These stages are; One-way radio and television era, two-way radio and television era, satellite era and modern technology era.

Teaching period with mail: It is the period when books and other teaching materials are sent to students with the development of postal services. Teachers send the teaching materials they prepared to the post and send them to the students. Students work by themselves with mailed materials and return the answers to the exam questions same way.

Two-way radio and television period: During this period, radio and / or television education was interchanged with letter teaching and radio and television education. For example, during the lecture, students are involved in the course through communication tools such as telephone, and the teacher is demanded to ask questions and receive answers. Audio and video conferencing features can also be included at this stage.

The period of satellite and modern technology: Lessons are delivered to students through the use of computers, satellite, fiber optics and other technologies in the much more advanced stage of ICT.

Moore and Kearsly stated that distance education can be divided into five classes. These five generations: by written and post, by radio and television broadcasts; thanks to the open teaching, the existence of a new administration in universities; by means of communication tools such as telephone, satellite, computer, group interaction in courses; (Moore and Kearsley, 2012).

2.2.1 Distance Education via Post

The first distance education practices were carried out via post, a printed material. Examples of printed materials are printed and reproduced products such as

textbooks, reading books, manuals, and lecture notes. In addition, many documents used with computer technology can also be printed by computer-connected printers; therefore, it can be classified as printed material because of its printable qualities in many digital materials with text content. Since the early days of history, written sources have been a major contributor to the human education process. However, because of the lack of interaction features of printed materials within the distance education method, they were inadequate on their own.

Teaching with letters, also known as work at home, began in 1880, when schools first served employees at home, at work, or at different venues. Distance education has emerged in America for the first time with a letter of interest because of its low cost. It was then widely used in England and many other countries. In 1883, Anan Eliot Ticknor offered educational opportunities for many women by establishing a home study school for women who lived far away from the city and had no access to education. At the beginning of the 1900's, there were many distance learning schools with many letters for profit (Moore and Kearsley, 2012).

The letter-to-school model is the oldest method of expressing the beginning of the history of distance education, though it happens prematurely. For the first time in our country, in 1961, the Ministry of National Education established the Letters Teaching Center and started this teaching activity. For the first time at the level of higher education, the Center for Higher Education with Letters was established in 1974.

2.2.2 Distance Education via Television

It is the activity of the students who do not have the possibility to continue the courses of the education through the television broadcasts at home, at work or in a

different place. In this way, while television is a one-way distance education tool, it is also possible to use TV as a two-way distance education tool in the television conference model. In this model, students can participate in classes live, ask questions and intervene in the class.

At present, TVs are actively used in the display of films, pictures, graphics, and texts in classrooms where traditional education is done. It is used as an educational tool for home-dependent students or those with certain disabilities. Religious education also started at first to train teachers and then to train for primary and secondary education institutions in films that were started to be used for educational purposes in the 1920s. Graphics are commonly used to make the subject more understandable by students. To provide more detailed information about the subject, web links should be used in the page, more graphics should be preferred than text. It is easier to describe an expression using graphics rather than many texts. For this reason graphic, video, audio players such as television have gained importance in the education process. So, more information can be used in radio and television training activities when various measures are taken, such as informing about the use of radio and television and curriculum appropriation (Yüzer, 2013).

2.2.3 Distance Education via Internet

In recent years, computer and computer based resources, which have improved accessibility and have improved technical characteristics, have been accepted as new, effective and very successful tools for distance education. Audio and visual sources can be digitally stored on computers through computer technology and written resources in digital environment can be printed by software. When the computer is used alone, basic features such as simulation, electronic exercise, problems and

applications, non-synchronized and non-interacting course resources, and archiving can be used. At the same time, the ability to digitally play back audio and video shows that non-interacting visual and audio resource can see the task (Yüzer, 2013).

Although computer technology alone has combined many of the old transmission vehicles into a single vehicle, it has not made a sufficient contribution to the effectiveness of distance education in terms of interaction. It has come about that distance education is comparable to traditional education, and the widespread use of internet technologies has begun (Moore and Kearsley, 2012).

Computers are the most important tools for running and using advanced multimedia systems. While the VCD player tool supports limited multimedia elements such as audio, video, and video, computers and multimedia materials prepared in any format can be used. Computers are the most important tools used to make distance learning activities as advanced and qualified as possible. In the widespread use of data storage media such as CDs and DVDs, these data storage media have also been used for unattended distance education, and CDs and DVDs for computers have been used extensively in reading. Computers are also difficult to use for web-based distance learning. Computers are used in the process of displaying the course materials, downloading and uploading by connecting to the Internet.

Internet is the largest network in the world and the number of participants is increasing day by day. Through the Internet, students and teachers can communicate and coordinate using tools like e-mail, chat rooms, chat programs, bulletin boards; Such as file transfer, electronic storage and sharing, the ability to view / listen to audio or visual sources on the Internet can be used simultaneously or

asynchronously, or interactively. Simultaneous virtual classrooms, virtual campuses can be created similar to traditional education, and student motivation can be increased by providing student - education association (Moore and Kearsley, 2012).

2.3 The Effectiveness of Distance Education in the Field of Vocational and Technical Education

Today, distance learning is carried out at the Open High School, the Open Primary School and the Vocational and Technical Open Education School depending on the General Directorate of Education Technologies of the Ministry of National Education in Turkey. As seen, distance education can be used to provide education at every level of education (Irgat, 2002).

Vocational and Technical Open Education Schools are institutions that acquire a profession by preparing distance school education or face-to-face training programs when necessary and prepares them to live by those who have graduated from elementary school or higher education.

A total of 68,208 persons, who have been successful in the training and examinations made by the Vocational and Technical Open Education School until today, received the Electrical Installation Certificate of Authority. The trainees are provided with training materials as well as printed materials such as course notes and textbooks prepared according to the programs approved by the Board of Education (https://mtao.meb.gov.tr/). In addition, necessary guidance services are provided and clarified by telephone or letter in unidentified matters. Trainees are responsible for all of the lessons of the program they are enrolled in and have to be trained and pass the exams. Trainees are taken to the written examinations held in May and

September at the end of training with distance learning techniques. Those who are successful in the written examinations, in which they are responsible for, are required to have three or five year study certificates according to their education status. Those whose working documents are accepted; are taking oral - applied exams made in November. Those who succeed in the oral - practical exams are given the Electrical Installation Certificate of Authority in their class. Those who are unsuccessful are entitled to take oral - applied exam four times. If their excuse is accepted by the school administration, they are entitled to two exams (Özen and Kahraman, 2002).

Trainees enrolled in the Vocational and Technical Open Education School, whose services are provided by the public, are able to solve all kinds of problems through telephone or correspondence. If they want to meet face-to-face, the necessary guidance is provided by the staff of the Vocational and Technical Open School in the Public Relations Department of the Technical Schools of the General Directorate of Educational Technology and all kinds of problems are solved. Vocational and Technical Open Education School was established in 1974. It is an institution that gives profession to the primary school graduate or higher educated citizens by applying distance education or face-to-face training programs when necessary, and thus preparing them for the life (Irgat, 2002).

Vocational education is also implemented at higher education level. A web-based distance education model has begun to be put into practice at vocational colleges that want to train self-confidence and self-sufficient individuals who are not afraid to introduce themselves: Afyon Kocatepe University Distance Education Vocational School Uşak University Distance Education Vocational School, Istanbul University

Distance Education Application And Research Center (ISUZEM), distance education program is applied in many vocational schools.

In vocational college programs in universities, distance education programs based on business management, office management, logistics, computer programming are mostly included. Bülent Ecevit University (BEU) Ahmet Erdoğan, who has not started the distance education program yet but is studying with computer and overhead projector reflections in a slightly different way from traditional teaching Ahmet Erdoğan Medical Laboratory Techniques (TLA), Medical Documentation and Secretarial (TDS), Medical Imaging Techniques, There are associate degree programs in the Operating Room Services, Paramedic (First and Emergency Care), Anesthesia Technician, Aged Care, Hair Care and Beauty Services, Medical Promotion and Marketing Program (student recruitment offered) and Child Development (offered to be opened). It was observed that web based distance education was provided at some vocational colleges in these associate degree programs in TLA and TDS associate degree programs (Özen and Kahraman, 2002).

Distance education 19th century. The form of letters teaching in the midst of England, USA and Germany. Especially in higher education, these practices are attracted to the studies of Ankara University in Turkey in the 1950s. Then, in 1960, distance education for the purpose of preparing higher education for the individuals in the secondary vocational education areas in 1960, establishment of an organization at the level of General Directorate in 1966, application of "Higher Education Center for Letters by Mail" in 1974, opening of "Open University" in 1978 And the establishment of the Open Education Faculty in 1981 (Alkan, 2011). One of the pioneering applications of distance education in higher education was initiated by

ODTÜ in 1996 and the application of the "Distance Education Regulation based on Communication and Information Technologies" has contributed to the spread of distance education at higher education level in 1999. Nowadays, especially distance education programs aimed at occupations mainly in the service sector can be summarized as follows.

The design of learning-teaching environments, which will provide the teaching of vocational training programs, especially cognitive behavior, is similar to the distance education practices, applied in general education. WEB-based live lessons (synchronous) can be done at a certain time of the day, generally in the evening, and students can follow the lessons from the environment they are currently in. Visual, written or voice communication facilities can be offered within the framework of the infrastructure possibilities of the system. At the same time, the design of asynchronous learning environment takes place in the system, students can read the course material presented to them at different times in the web environment, prepare homework, communicate with e-mail, discuss in the forum rooms and so on. Teaching of skills in vocational education has a significant importance. The way in which applied studies can be done within the scope of distance education technologies are constantly discussed. Especially, it is possible to learn industrial vocational fields in a distance learning virtual learning environment which is designed as a web-based learning environment.

One of the important dimensions of the productivity of the quality of education is the educated value, the perspective view of the society and the individual. Given the benefits that individuals acquire as a result of education, in other words, how well the behaviors meet the qualifications and expectations; the educational perspective and

the perception that is created can be good at that level. Distance learning is based on the learning environment design on which a student-centered approach is based, so in most of the implementation process the student is more likely to be self-determined. For this reason, students who are accustomed to learning in teacher-centered settings and who do not have adequate equipment in the areas of learning and motivation can have negative judgments against the system and fail to demonstrate the desired performance. At the same time, trainers-teachers who take part in the system should also believe in the usefulness of the system. In some researches it is observed that teachers may be in a more negative judgment against distance education than students (Yiğit et al., 2010). If pupils and teachers are aware of their responsibilities, it is also possible to obtain positive results (Geçer, 2013).

When the programs are examined, what is expected from the learners is that they can use the computer and at least the internet. There are e-books, e-lectures, e-homeworks, e-TVs, discussions and simultaneous lectures in these vocational colleges and open education faculties where distance education program is applied. Learners are able to communicate with online friends and tutors in the virtual environment and ask questions. The textbooks of the lessons taught in all programs are presented to the students over the internet and the students can write the course notes. Course contents are presented to the students through e-Course software which includes lectures in video accompaniment. The interaction with the content is supported by the narratives, as well as the tools developed for the course content, designed to maximize the interaction of the students with the content.

E-Television service is to enable students to record the TV programs belonging to the classes on their computers and watch them whenever they want. The e-homework

tool which is a web based application is used to send the homeworks given within the scope of the programs and to publish the evaluation results. Discussion social sharing environments are used to ensure that students exchange information with each other and with their advisors. In addition, students can participate in the lectures given by the lecturer by signing in the virtual classroom software on the day and time specified in the program for each lecture. As you can see, it is observed that the theory of constructivism is more based on the design of WTE environments. The development of a virtual learning environment based on the Social Creator and / or Cognitive Creator Theory will also create a collaborative learning environment as well as enable the learner to have a say in his own education.

If this system is implemented correctly at the same time, it can also be used as an effective tool for the development of skills in vocational training. There are many grounded findings that support this. First of all, most of the distance education systems have wider access and cost efficiency. Second, the rapid development of the Internet in the last thirty years shows that there is a ready infrastructure that can be activated to promote vocational education. Third, the World In the majority of distance education institutions, the most up-to-date information and technologies are used (Wagler, 2015).

In particular, the point that we should pay attention to in terms of our country is the inadequacy of qualified labor force despite the increasing unemployment rates in our country. Distance education, in this respect, needs to be supported in terms of needs, institutional and financial aspects. When distance education is supported in a sufficient amount and when it is applied effectively, it can be ensured that individuals who work in job areas are more qualified and those who are looking for

job are qualified members in a certain profession when vocational and technical training is given to those who are not working or have no vocational training. Even those in prison can return to their social lives as qualified members at the end of their time in prisons, provided that adequate facilities are available for distance education. Distance education at this point can serve both to solve the unemployment problem in our country and to solve the needs of qualified personnel.

Eastern Mediterranean University is one of the leading institution that started using distance education. The university has started to provide services in the field of distance education through special software and systems that it has developed since 2000 (http://ww1.emu.edu.tr/tr/akademik/enstituler/uzaktan-egitim-enstitusu/643). The Distance Education Institute currently has three graduate programs approved by the Higher Education Council (YÖK).

2.4 Related Researches

This section includes related researches have done before that directly or indirectly linked to distance education.

Düzakın and Yalçınkaya (2008), tried to determine the distance education possibilities of the current teaching staff of Çukurova University with a developed questionnaire. The universe of the study is all the teaching staff (179) in the Çukurova University. The purpose of the study is to explain the concept of distance education, to examine web based distance education system, to determine the teaching staff of Çukurova University to measure their susceptibility to web based distance education tools and to reveal their attitudes towards web based distance education system. According to the results of the research; teachers expressed a

generally positive view of the program. In addition, it has been suggested that the curriculum should be continuously developed in parallel with the developments in science and technology.

Gök (2011), thought that it is important to determine the distance education perceptions of the teaching staff in terms of a more effective distance education program. The universe of the study is 81 teaching staff in 13 different university. The aim of the research is to think that in-service training can be used to meet the needs of the stakeholders, to address the problems in the planning process, and to benefit from a more effective distance education organization. According to the results of the research; teachers expressed a generally positive view of the program. In addition, it has been suggested that the curriculum should be continuously developed in parallel with the developments in science and technology.

Chapter 3

METHODOLOGIES

This section discusses the research design, participants, data collection tools, data analysis and validity and reliability.

3.1 Research Design

This study is quantitative. Quantitative methods emphasize objective measurements and the statistical, mathematical, or numerical analysis of data collected through polls, questionnaires, and surveys, or by manipulating pre-existing statistical data using computational techniques (Rubin and Babbie, 2010). Quantitative research focuses on gathering numerical data and generalizing it across groups of people or to explain a particular phenomenon (Muijs D., 2011). In the study, survey method was used as data collection tool which is created by Özbudun (2010) and it has personal information (5 questions), general evaluation of distance education (8 questions), advantages of distance education (12 questions), disadvantages of distance education (7 questions), the importance of distance education (6 questions), web-based laboratories (8 questions) were translated into English. The grouping of these questions was done by Özbudun (2010) using factor analysis method. Validity and reliability tests of the questionnaire used were made by Ozbudun (2010).

3.2 Participants

The participants of the research consists 48 students currently studying in the Faculty of Architecture at Eastern Mediterranean University Distance Learning Center in Turkish Republic of Northern Cyprus in 2016-2017. These participants are taking only this course as a distance education which is Cyprus History and Culture. The reason that choosing this group is that they are still in the university and it is easy to reach them for the research.

Table 1: Demographic Characteristics of Participants

		Count	Column N %
Gender	Male	32	66,7%
	Female	16	33,3%
What is your purpose for using a computer and internet?	Educational	14	29,2%
	Social Purposes	14	29,2%
	Professional Purposes	9	18,8%
	Playing Games	11	22,9%
	Email	0	,0%
Have you recieved computer-related courses?	yes	46	95,8%
	no	2	4,2%
What is your frequency of internet useage per day?	Less than 1 hour	1	2,1%
	Between 1-2 hours	11	22,9%
	More than2 hours	36	75,0%
Do you own a computer?	yes	48	100,0%
	no	0	,0%
What is your distance learning model?	Senkron	13	27,1%
	Asenkron	35	72,9%
Which device that you mostly use during your distance education?	Personal Computer	16	33,3%
	Laptop	21	43,8%
	Mobile Phone	0	,0%
	Portable Computer	11	22,9%
	Television	0	,0%
Which environment do you mostly prefer for your distance education?	Home	42	87,5%
	Workplace	6	12,5%
	Internet Cafe	0	,0%
	School Computer Laboratory	0	,0%

Table 1 shows that gender is not equally distributed. Out of the total sample size, 32 (66.7%) respondents were male while 16 (33.3%) were women. Use of computer and internet result shows that for “Educational” and “Social Purposes” were accessed equally. 14 (29.2) accedes that they use it computer and internet for the aforementioned purposes. Those who posits that they do use it for professional purposes were 9 (18.8%), and 11 (22.9%) said they do mainly for playing games.

Enrollment of computer-related courses and findings show that almost all participants have entered for computer-related courses at some points (N=46; 95.8%). Only 2 (4.2%) of the respondents haven't done. Daily usage of internet was measured and result shows that only 1 (2.1%) respondent uses internet in less than an hour. Those who accede that they do between one to two hours were 11 (22.9%). 36 (75.0%) said their daily usage of internet is two hours and above. Computer possession and all respondents accede that they do have a computer (N=48; 100%). Distance learning model shows that 35(72.9%) accede that it is asynchrony. Only 13 (27.1%) of the respondents said synchrony. According to the education model students use some kind of device for distance education. 16 (33.3%) of the respondents posit that they use personal computer. 21(43.8%) said laptop. Those who said portable computer were 11(22.9%). Respondents were questioned about where they prefer to engage in distance learning activities and 42 (87.5%) said home while 6(12.5%) said workplace.

3.3 Data Collection Tools

The data collection tool for this study is questionnaire informed by a study conducted by Özbudun (2010). The questionnaire was therefore adapted as permitted by the aforementioned author to fit the purpose and objectives of this research. Before, piloting, the questionnaire got approval from experts in the field. After approval, the questionnaires were developed and tested on the students who selected as pilots in Ankara. An example of this questionnaire is affixed in Appendix-C.

Questionnaires were given to participants in a bid to obtain data necessary for the research goal; 48 questionnaires were shared to 48 participants during data collection process. The questionnaire was designed into six sections of which the first part

comprises of the demographics and the second part contains 8 questions about general evaluation of distance education, 12 questions about advantages of distance education, 7 questions about disadvantages of distance education, 6 questions about the importance of distance education and 8 questions about web-based laboratories. This is to ensure validity and reliability of the research and to deliberate on the critical issues meant for investigation throughout the study.

The questionnaire adopts a five point rating scale for the second section of the questionnaire namely: A Lot, Pretty Much, Neutral, Poor and Not At All. While the second section of the questionnaire adopts the five point Likert Scale to measure the degree of responses from the respondents.

At the end of the data collection, all data analysis are examined through the survey questionnaire for perfection and completeness. The data were also put into a database in Statistical Package for the Social Sciences (SPSS), and were analyzed according to descriptive statistics test. The Frequency tables and descriptive analysis were constructed to display the results with respect to each of the research questions. Descriptive analysis is use to summarize data into a meaningful meaning and for better understanding (Thompson, 2009).

3.4 Data Analysis

Data is one of the chief components of any research study and accordingly, it greatly affects the results of the research. Evidently, there are numbers of different resources that the researcher can refer to in order to collect relevant data about his/her research (Kumar, 2005).

Qualitative analysis was used to display the total analysis of the data, by deriving the max and min point, group mean, average mean, p value points, significant difference, median and modal point. The t-test was adopted to analyze the data that has to do with only two variables in a group e.g. gender while ANOVA was used analyze variables that contains more than two variables like purpose of using a computer and internet and received computer-related courses for the work through SPSS v.21.0 (IBM.org).

2.5 Reliability and Validity

Measuring the tool of data collection is an important part of research. Validity and reliability of this study to ascertain legitimate result.

Table 2: Reliability Statistics

Cronbach's Alpha	N of Items
,843	30

As shown in Table 2, Cronbach's Alpha of the study is 0.843. This was proven with an analysis of 30 items on the questionnaire. 0.843 indicates a very high reliability.

Chapter 4

FINDINGS

This section chapter centers on analysis of the questionnaires administered to students (n=48) in the Eastern Mediterranean University; a public university in North Cyprus in 2016/2017 academic session. All analysis was aided by the Statistical Software Package of Social Science (SPSS).

4.1 An assessment of students' about general evaluation of distance education architecture course

Table 3 shows that an assessment of students' about general evaluation of distance education architecture course.

Table 3: General Evaluation of Distance Education

GENERAL EVALUATION OF DISTANCE EDUCATION	A Lot		Pretty Much		Neutral		Poor		Not At All	
	f	%	f	%	f	%	f	%	f	%
2.4 How sufficient is your distance education model to meet your needs of accessing to programs?	12	25,0	24	50,0	10	20,8	2	4,2	0	0
2.5 How sufficient is your distance education program to meet your needs in terms of acquiring relevant qualifications?	13	27,1	24	50,0	10	20,8	0	0	1	2,1
2.6 How sufficient is your distance education program to meet your visual needs?	17	35,4	16	33,3	11	22,9	4	8,3	0	0
2.7 How sufficient is your distance education program to meet your needs in terms of ease of use?	16	33,3	18	37,5	10	20,8	4	8,3	0	0

2.8 How sufficient is your distance education program to meet your needs for ease of understanding?	15	31,3	17	35,4	12	25,0	3	6,3	1	2,1

Table 3 shows that ıtem 2.4 measures respondents' sufficiency level when it comes to the distance education model they use and how it helps them to access programs. 25.0% of them said "A lot", 50.0% said "Pretty much", 20.8% said "Neutral" and 4.2% of them said "Poor". Result shows that those who said "Pretty much" were the majority

Item 2.5 shows that measures respondents' sufficiency level when it comes to how distance education program helps them to acquire relevant qualifications. Result shows that 13 (27.1%) respondents agree that it is highly sufficient, 24(50.0%) participants accede that it is to some degree. 10 (20.8%) were neutral about this statement while 1(2.1%) respondent said it is not sufficient. Those who said it is to some degree were the majority.

Item 2.6 shows that measures respondents' sufficiency level when it comes to how distance education program helps them to meet their visual needs. Respondents who said it is highly sufficient are 17(35.4%). 16 (33.3%) of the sample size said it is sufficient to some degree. 11 (22.9%) of the sample size were neutral about this assertion. Those who said "poor" were 8.3% (N=4) of the sample size. Result says that majority of the respondents agrees that distance education is highly sufficient for them when it comes to visual satisfaction.

Item 2.7 shows that measures respondents' sufficiency level when it comes to how distance education program helps them in terms of easy usage. 16 (33.3%) of the

respondents says it highly sufficient, 18 (37.5%) said it is some degree. 10 (20.8%) participants were neutral about this assertion. 4 (8.3%) said it is poor. Result reveals that majority of the respondents said it is sufficient to a certain degree.

Item 2.8 shows that measures respondents' sufficiency level when it comes to how distance education program helps them in terms of easy understanding. 15 (31.3%) respondent agrees that it is highly sufficient. 17 (35.4%) participants said it is to some degree. Those who said it is neutral are 12 (25.0%). 3 (6.3%) of the respondents posits that it is poor. Result shows that majority of the respondents said it is sufficient to some degree.

4.1.1 Relation between gender and students assessment about general evaluation of distance education architecture course

According to the independent t-test result there is no significant relation between gender and students assessment about general evaluation of distance education architecture course. There is no significant difference according to gender.

According to Fidan, (2016), said that it is seen that there is no meaningful relationship between gender and distance education.

4.2 An assessment of students' about advantages of distance education architecture course

Table 4 shows that an assessment of students' about advantages of distance education architecture course.

Table 4: Advantages of Distance Education

ADVANTAGES OF DISTANCE EDUCATION	A Lot		Pretty Much		Neutral		Poor		Not At All	
	f	%	f	%	f	%	f	%	f	%
3.1 How appropriate do you find distance education to be accessible to students who do not have face-to-face learning opportunities?	15	31,3	24	50,0	6	12,5	3	6,3	0	0
3.2 How appropriate do you find distance training is appropriate for the reduction of education costs?	17	35,4	20	41,7	8	16,7	2	4,2	1	2,1
3.3 How appropriate do you find distance education to increase the number of qualifications in education due to the fact that distance education is a decentralized system?	9	18,8	19	39,6	14	29,2	3	6,3	3	6,3
3.4 How appropriate do you find distance education to be sustainable?	8	16,7	20	41,7	17	35,4	3	6,3	0	0
3.5 How appropriate do you find distance education to be able to transfer technological developments faster?	14	29,2	21	43,8	7	14,6	4	8,3	2	4,2
3.6 How appropriate do you find distance education to ensure that distance education is equally beneficial to all individuals?	7	14,6	32	66,7	9	18,8	0	0	0	0
3.7 How appropriate do you find distance education for individual and independent learning and mass education, when individuals need different training and where the current education system cannot afford it, by developing new possibilities?	8	16,7	27	56,3	13	27,1	0	0	0	0

3.8 How appropriate do you find distance education for the elimination of disruptions to traditional education practices and the creation of new options?	14	29,2	18	37,5	13	27,1	2	4,2	1	2,1
3.9 How appropriate do you find distance education for creating new models and creating educational opportunities for individuals outside of current education?	14	29,2	22	45,8	6	12,5	5	##	1	2,1
3.10 How appropriate do you find distance education to be an opportunity to communicate effectively between students and educators living in different countries of the world?	18	37,5	14	29,2	13	27,1	1	2,1	2	4,2
3.11 How appropriate do you find distance education to be affordable for students to benefit from the educational opportunities of the universities in different countries of the world?	18	37,5	20	41,7	7	14,6	3	6,3	0	,0
3.12 How appropriate do you find distance education for students who are experiencing psychological problems (eg social phobia) and for being in the education system?	13	27,1	25	52,1	9	18,8	0	0	1	2,1

Table 4 shows that ıtem 3.1 measures appropriateness of distance education when it comes to access for students who are not privileged to have face-to-face learning. 15(31.3%) respondents said it is highly sufficient. 24 (50.0%) participants said it is to some degree. Those who were neutral about that assertion were 6 (12.5 %). Those who said “poor” were 6.3% (N=3). Result shows that majority of the respondents said it is some degree.

Item 3.2 shows that measures appropriateness of distance education when it comes to cost of education. 17 (35.4%) respondents said it is highly appropriate. 20 (41.7%) said it is appropriate to some degree. Those who were neutral about this statement were 8% (N=16.7). Those who said “poor” were 2(4.2%). Only 1(2.1%) respondent

accede that it is inappropriate. Result shows that majority of the respondents said it is appropriate to some degree.

Item 3.3 shows that measures appropriateness of distance education when it comes to increment in the number of qualifications in education. We measured this considering the fact that distance education is a decentralized system. 9 (18.8%) respondents said it is highly appropriate. 19 (39.6%) respondents said it is appropriate to some degree. Those who said "neutral" were 14 (29.2%). Those who said "poor" and "not at all" were 6.3% (N=3), respectively. Result shows that majority of the participants said it is appropriate to some degree.

Item 3.4 shows that reveals participants' response to sustainability of distance education. 8 (16.7%) participants' said it is highly appropriate. 20 (41.7%) respondents said it is to some degree. 17 (35.4%) said "neutral". Those who said "poor" were 6.3% (N=3) of the sample size. Result shows that majority of the respondents said it is appropriate to some degree.

Item 3.5 shows that reveals participants' response to the impact of distance education on technological developments. 14 (29.2%) respondents accede that is highly impactful. 21 (43.8%) posit that it is some degree. Those who said it is "neutral" were 14.6% (N=7) of the sample size. Those who said it is poorly impactful are 4(8.3%). 2 (4.2%) said it isn't impactful at all. Result shows that majority of the respondents it is impactful to some degree.

Item 3.6 shows that participants were asked if they think distance education is equally beneficial to every individual. Respondents who said it is highly beneficial to

all individuals were 7(14.6%). 32 (66.7%) said it is some degree. 9 (18.8%) were neutral. Majority of the respondents said it is beneficially to all and sundry, to some degree.

Item 3.7 shows that shows that 8(16.7%) agrees to a high extent when asked if distance education (independent and mass education) develop new possibilities. 27 (56.3%) said distance education develops new possibilities to some extent. Those who were neutral to the statement were 27.1% (N=13). Result shows that majority said it is some degree.

Item 3.8 shows that respondents were asked if they think distance education would eliminate traditional educational system and present newer options. 14 (29.2%) accede that they think so. 18 (37.5%) said it would to some degree. Those who said "neutral" about this statement were 13 (27.1%). Those who said "poor" were 2(4.2%). 1 (2.1%) respondent said "not at all". Result shows that majority of the respondents feels that distance education would eliminate traditional educational system, to some degree.

Item 3.9 shows that reveals participants' response to the impact of distance education on the creation of new models and, facilitating newer educational opportunities for individuals outside of their current engagement. Respondents accede that it is highly impactful (N=14, 29.2%). 22 (45.8%) respondents said, to some degree. 6 (12.5%) were neutral about this statement. 5 (10.4%) said it isn't impactful. 1(2.1%) didn't respond to this item. Result shows that majority of the respondents believe that it is impactful to some extent.

Item 3.10 shows that participants were asked if they see distance education to be an opportunity for students and education in different countries to communicate. Respondents said they highly believe so (N=18; 37.5%). 14 (29.2%) respondents said it is to some degree. Those who are neutral about the assertion were 13(27.1%). Only 1 (2.1%) person said "poor". Those who totally disagreed with the statement were 2(4.2%). Result shows that majority of the respondents believe that distance education is an opportunity for students and education in different countries to communicate.

Item 3.11 shows that participants were asked if they find distance education affordable for students across the world. 18 (37.5%) said they highly believe so. 20 (41.7%) said it is affordable to an extent. 7 (14.6%) were neutral about this assertion. 3 (6.3%) it is "poor". Result shows that majority of the respondents feel that distance education is affordable for students across the world.

Item 3.12 shows that participants were asked if they find distance education beneficial for students who are experiencing psychological problems (e.g. social phobia). 13 (27.1%) said they highly believe that it is beneficial for them. 25 (52.1%) said it is to some degree. Those who are neutral about this assertion were 9 (18.8%). Only 1 respondent disagreed (N=1; 2.1%). Result shows that majority of the respondents believe that it is beneficial to some degree.

4.2.1 Relation between gender and students assessment about advantages of distance education architecture course

According to the independent t-test result there is no significant relation between gender and students' assessment about advantages of distance education architecture course. There is no significant difference according to gender.

According to Ateş and Altun, (2008), said that the attitudes of students in the sample to distance education did not show a significant relationship with their genders.

4.3 An assessment of students' about disadvantages of distance education architecture course

Table 5 shows that an assessment of students' about disadvantages of distance education architecture course.

Table 5: Disadvantages of Distance Education

DISADVANTAGES OF DISTANCE EDUCATION	A Lot		Pretty Much		Neutral		Poor		Not At All	
	f	%	f	%	f	%	f	%	f	%
4.1 How appropriate is the distance education model for some students not being able to access required facilities?	1	2,1	10	20,8	23	47,9	7	14,6	7	14,6
4.2 How much does the changes in communication methods affects the education?	5	10,4	10	20,8	14	29,2	14	29,2	5	10,4
4.3 How much does the infrastructure changes affects the education plans?	6	12,5	8	16,7	14	29,2	12	25,0	8	16,7
4.4 How appropriate do you find distance education to provide additional responsibility for affecting the teacher's responsibility field.	3	6,3	8	16,7	19	39,6	12	25,0	6	12,5

4.5 How appropriate do you find distance education in terms of face-to-face interactions environments and possibilities that are important in learning environments?	3	6,3	12	25,0	17	35,4	14	29,2	2	4,2
4.6 How appropriate do you find distance education to failure to solve learning difficulties immediately in the learning process and in term of the inconvenience that may arise after this?	5	10,4	8	16,7	18	37,5	14	29,2	3	6,3
4.7 How appropriate do you find distance education in terms of planning difficulty for individuals who do not have self-study habits and whose skills are not developed?	5	10,4	10	20,8	17	35,4	14	29,2	2	4,2

In table 5, item 4.1 shows that participants were asked if they find distance education models that students can't access relevant. 7 (14.6%) said it is highly relevant. 7(14.6%) said it is some degree. Those who are neutral about this assertion were 23 (47.9%). 10(20.8%) said it is "poor". 1(2.1%) totally disagreed. Result shows that majority of the respondents were neutral bout this assertion.

Item 4.2 shows that respondents were asked how they feel changes in communication methods affect the education. 5 (10.4%) said they feel it highly affects it. 15 (31.3%) said it is some degree. Those who were neutral about this assertion are 13 (27.1%). Those who said "poor" were 10 (20.8%). Those whom totally disagreed that communication methods affect the education are 5 (10.4%). Result shows that majority of the respondents believe that communication methods affect the education to some degree.

Item 4.3 shows that respondents were asked if they feel infrastructure changes affect education plans. 8 (16.7%) said it highly affects it. 12 (25.0%) said it affects it to

some degree. 14 (29.2 %) are neutral about this assertion. Those who said “poor” were 8(16.7%). 6 (12.5%) respondents totally disagreed that infrastructure changes do affect education plans. Result shows that majority of the respondents were neutral about this assertion.

Item 4.4 shows that respondents were asked if the think distance education has only provided additional responsibility for teachers. 6 (12.5%) accede that they highly think so. 12 (25.0%) said it has to some degree. 19 (39.6%) were neutral about this assertion. Those who said “poor” were 8 (16.7%). Only 3 (6.3%) totally disagreed. Result shows that majority of the respondents were neutral about this assertion.

Item 4.5 shows that respondents were asked how they feel about the appropriateness of distance education in terms of absence of face-to-face interactions which is highly important in learning environments. 2 (4.2%) said they think it is highly appropriate. 14 (29.2%) said that it is appropriate to some extent. Those who were neutral about this assertion are 17 (35.4%). 12 (25.0) said “poor”. Only 3 (6.3%) totally disagreed. Result shows that majority of the respondents were neutral about this assertion.

Item 4.6 shows that respondents how they feel about they feel about distance education’s failure to solve learning difficulties immediately. Only 3 (6.3%) said they think it is highly appropriate regardless of that flaw. 14 (29.2%) were neutral about this assertion. 8 (16.7%) said it is “poor”. Those who totally disagreed about this assertion are 5(10.4%). Result shows that majority of the respondents were neutral about this assertion.

Item 4.7 shows that participants were asked how appropriate they find distance education in terms of helping students who do not have self-study habits and whose skills are not developed. Only 2 (4.2%) said it is highly appropriate. 14 (29.2%) said it is some degree. 17 (35.4) were neutral about this assertion. Those who said it is "poor" were 10 (20.8%). Those who totally disagreed were 5(10.4%). Result shows that majority of the respondents were neutral about this statement.

4.3.1 Relation between gender and students assessment about disadvantages of distance education architecture course

According to the independent t-test result there is no significant relation between gender and students assessment about disadvantages of distance education architecture course. There is no significant difference according to gender.

4.4 An assessment of students' about importance of distance education architecture course

Table 6 shows that an assessment of students' about importance of distance education architecture course.

Table 6: Importance of Distance Education

IMPORTANCE OF DISTANCE EDUCATION	A Lot		Pretty Much		Neutral		Poor		Not At All	
	f	%	f	%	f	%	f	%	f	%
5.1 How appropriate do you find distance education in terms of the possibility of giving more training at the same time?	5	10,4	26	54,2	16	33,3	1	2,1	0	,0
5.2 How appropriate do you find distance education to provide opportunities for students to increase their learning opportunities and alternatives?	10	20,8	23	47,9	12	25,0	2	4,2	1	2,1

5.3 How appropriate do you find distance education in terms of removing the physical distance from the education process?	15	31,3	19	39,6	11	22,9	3	6,3	0	,0
5.4 How appropriate do you find distance education in terms of being able to reach the target group more quickly?	15	31,3	21	43,8	9	18,8	2	4,2	1	2,1
5.5 How appropriate do you find distance education in terms of speeding up the education process?	19	39,6	17	35,4	10	20,8	2	4,2	0	,0
5.6 How appropriate do you find distance education in order to make the students more active?	12	25,0	14	29,2	18	37,5	1	2,1	3	6,3

In table 6, item 5.1 shows that respondents were asked how appropriate you find distance education in terms of its potential of a simultaneous training. 5 (10.4%) respondents said it highly appropriate. 26 (54.2%) said it is some degree. 16 (33.3%) were neutral about this assertion. Only 1(2.1%) respondent said it is "poor". Result shows that majority of the respondents said it is appropriate to some degree.

Item 5.2 shows that participants were asked if they find distance education capable of providing learning opportunities for students. 10 (20.8%) said it highly capable. 23 (47.9%) said it is some degree. 12 (25.0%) were neutral about this assertion. 2 (4.2%) said it is not capable. Only 1(2.1%) said it is highly incapable. Result shows that majority of the respondents said distance education is capable of providing learning opportunities for students, to some degree.

Item 5.3 shows that respondents were asked if they find distance education important in terms of extinction of space and time in the education process. 15 (31.3%) said it is highly important. 19 (39.6%) said it is to an extent. 11(22.9%) were neutral about

this statement. Those who disagreed with this assertion were 3(6.3%). Result shows that majority of the respondents said they find distance education important in terms of extinction of space and time in the education process, to some degree.

Item 5.4 shows that respondents were asked if they find distance education beneficial in terms of its ability to reach the target audience easily. 15 (31.3%) agreed they highly do. 21 (43.8%) said they do somewhat. 9 (18.8%) were neutral about the statement. 2 (4.2%) accedes that it isn't beneficial. Only 1 (2.1%) said "not at all". Result shows that majority of the respondents say it is beneficial to some extent.

Item 5.5 shows that respondents were asked if they find it appropriate that distance education is speeding up the education process. 19 (39.6%) respondents said they find it appropriate. 17(35.4%) respondents said to some extent. 10 (20.8%) were neutral about this assertion. 2 (4.2%) didn't agree. Result shows that majority of the respondents find it appropriate to a great extent.

Item 5.6 shows that participants were asked if distance education makes students more active. 12 (25.0%) respondents said that they agree to a large extent that distance education does make students more active. 14 (29.2%) said it does somewhat. 18 (37.5%) were neutral about this assertion. Only 1 (2.1%) respondent didn't agree. 3 (6.3%) highly disagrees. Result shows that majority of the respondents agrees to a certain extent.

4.4.1 Relation between gender and students assessment about importance of distance education architecture course

According to the independent t-test result there is no significant relation between gender and students assessment about advantages of distance education architecture course. There is no significant difference according to gender.

Chapter 5

CONCLUSION

This study has been able to appropriately assess the opinion of students on the use of web based method of distance education. Findings have been able to enumerate the advantages and disadvantages there in this mode of education. Distance education has been seen to be an effective and efficient way in meeting the educational needs of various groups of people due to its accessibility. According to Cantelon (1995), distance education has proved itself to being one of the unique ways of education due to its ability to surpass the challenges of time and space, hereby providing students' unlimited access to education at convenience. Also Bernard and Abrami (2004), support the fact that distance education provides reasonable satisfaction to its students with the array of facilities, materials and opportunities it provides to its students. This study is also able to categorically state that most of the students enrolling in this form of education derive reasonable satisfaction in their quest to access education and knowledge.

Distance education has also been able to provide educational satisfaction and fulfillment to students who are into it. For example, distance education has given students who have lost their sight or hearing to access education. This is as a result of the fact that the most important tool or facility required for learning is an internet enabled computer device. Distance education has therefore helped improve the number of educated members of different societies as there is no need for them to

physically have the educational institution on ground before they can access education. One of the major challenges in acquiring education today is the cost. With the growth of distance education, accessing education has become easier, safer and more affordable as a result of the "learn at ease" feature inherent in distance education.

The findings in this research can be referred to as an eye opener based on the fact that the researcher has been able to statistically prove that distance learning is highly sustainable. This is as a result of its numerous impact and influence in improving global educational standards as well as creating a positive impact on both young and old. Again, one important factor is based on the fact that distance learning is an all-encompassing platform of education that gives room for both young and old to learn. Adults who are almost at the point of giving up on the need to get a higher education can enroll without any stress. This is based on the fact that the basic requirement is internet enabled computer systems that will enable them access their school portal and the necessary materials. Also based on the high competitiveness and the tasks of getting admitted into the university, distance learning has the facility to accommodate more students than the traditional mode of learning, thereby creating a wider opportunity for both young and old.

The continuous growth of the distance learning program has created higher needs for a technologically inclined society and indeed world. Easy and reliable access to technology, most importantly internet access in the developing countries is becoming more pertinent. This is also as distance learning is continually gaining confidence form the global society. Though distance learning may not create an opportunity for much of discoveries or highly significant research breakthrough based on its

nonverbal communication method, students who enroll into such system of education would require more of personal efforts and self-development. Though there are variances in the courses being studied, the models used in the distance education programs have proved to be quite effective and efficient. There is need to continue looking into it so as to make the programs effective and efficient, thereby creating an opportunity for better understanding and the ultimate aim which is to make success.

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APPENDICES

Appendix A: (Ethics Committee Approval)

Doğu Akdeniz Üniversitesi
"Uluslararası Kariyer İçin"
Eastern Mediterranean University
"For Your International Career"
P.K.: 99628 Gazimağusa, KUZEY KIBRIS / Famagusta, North Cyprus, via Mersin-10 TURKEY
Tel: (+90) 392 630 1995
Faks/Fax: (+90) 392 630 2919
bayek@emu.edu.tr
Etik Kurulu / Ethics Committee

Sayı: ETK00-2017-0238 05.09.2017
Konu: Etik Kurulu'na Başvurunuz Hk.

Sayın Yenilmez Ufuk Yılmaz
Bilgisayar ve Öğretim Teknolojileri Eğitimi Bölümü
Yüksek Lisans Öğrencisi

Doğu Akdeniz Üniversitesi Bilimsel Araştırma ve Yayın Etiği Kurulu'nun ***07.08.2017*** tarih ve ***2017/48-17*** sayılı kararı doğrultusunda, ***An Assessment of Students' Opinions About Use of Web Based Distance Education: Eastern Mediterranean University, an Example of Faculty of Architecture*** adlı tez çalışmanızı, Prof. Dr. Mustafa İlkan'ın danışmanlığında araştırmanız, Bilimsel ve Araştırma Etiği açısından uygun bulunmuştur.

Bilginize rica ederim.

Yrd. Doç. Dr. Mümtaz Güran
Etik Kurulu Başkan Vekili

MG/sky.

Appendix B: (Participant Informed Consent Form)

Yenilmez Ufuk YILMAZ
MSc Computer and Instructional
Technology in Teacher Education
Esmerim St., Ki Ap., Gazimagusa/TRNC
0-533-859-6556
rufuk8925@gmail.com

Participant Informed Consent Form

Dear Participant,

The research carried out aims to provide a general assessment of Synchrony and Asynchrony distance education models and ascertain the strengths and weaknesses of Web Based Laboratory applications. At the end of the research, measures to protect the strengths of the applications and to improve the weaknesses of the applications will be determined.

As a researcher, I would appreciate if you could take some time to fill out this questionnaire. It is expected to last 15 minutes. The participation to this questioner is entirely voluntarily. Participant may choose not to take the survey, to stop responding at any time, or to skip any questions that you do not want to answer. We assure you that all the information is provided will be confidential and will not be used for any further research.

Participant;

Date**:**
Name**:**
Surname**:**
Address**:**
Phone Number**:**
Signature**:**

Yenilmez Ufuk YILMAZ
MSc Computer and Instructional
Technology in Teacher Education
Esmerim St., Ki Ap., Gazimagusa/TRNC
0-533-859-6556
rufuk8925@gmail.com

Prof. Dr. Mustafa İLKAN
School of Computing and
Instructional Technology
0-392-630-1246
mustafa.ilkan@emu.edu.tr

Appendix C: Sample Questionnaire

STUDENT QUESTIONNAIRE

Dear Participant,

The research carried out aims to provide a general assessment of Synchrony and Asynchrony distance education models and ascertain the strengths and weaknesses of Web Based Laboratory applications. At the end of the research, measures to protect the strengths of the applications and to improve the weaknesses of the applications will be determined.

As a researcher, I would appreciate if you could take some time to fill out this questionnaire. It is expected to last 15 minutes. The participation to this questioner is entirely voluntarily. Participant may choose not to take the survey, to stop responding at any time, or to skip any questions that you do not want to answer. We assure you that all the information is provided will be confidential and will not be used for any further research.

I thank you for your contributions to the research and wish you the best of luck in your studies.

Yenilmez Ufuk YILMAZ

M.Sc. Student

PART – I

PERSONEL INFORMATIONS

1.1 What is your gender?

a. ( ) Male **b.** ( ) Female

1.2 What is your purpose for using a computer and internet? (Please tick the most predominant option)

a. ( ) Educational (Homework, Research, and Presentation, etc.)

b. ( ) Social Purposes (Facebook, Twitter, YouTube, etc.)

c. ( ) Professional Purposes

d. ( ) Playing Games

e. ( ) E-mail

1.3 Have you received computer-related courses?

a. ( ) Yes **b.** ( ) No

1.4 What is your frequency of internet usage per day?

a. ( ) Less than 1 hour

b. ( ) Between 1-2 hours

c. ( ) More than 2 hours

1.5 Do you own a computer?

a. ( ) Yes **b.** ( ) No

PART – II

GENERAL EVALUATION OF DISTANCE EDUCATION

2.1 Select the distance learning model you have received. (Please choose one)

a. ( ) Senkron **b**. ( ) Asenkron

Explanation:

Please, state your opinions based on the distance learning model you have mentioned above.

2.2 Which device that you mostly use during your distance education?

a. ( ) Personal Computer **d.** ( ) Portable Computer

b. ( ) Laptop **e.** ( ) Television

c. ( ) Mobile Phone

2.3 Which environment do you mostly prefer for your distance education?

a. ( ) Home **c.** ( ) Internet Cafe

b. ( ) Workplace **d.** ( ) School Computer Laboratory

Explanation:

Please mark the best evaluation given below with (O), accordingly with your point of view about how effective distance education application is. Please mark only one option for each question.

Scoring scales related to the questions are;

A Lot: "Completely Accepted",

Pretty Much: "Mostly Accepted",

Neutral: "Not Sure",

Poor: "Don't Accept",

Not At All: "Unacceptable"

QUALIFICATIONS		CRITERIA				
		A Lot	Pretty Much	Neutral	Poor	Not At All
2.4	How sufficient is your distance education model to meet your needs of accessing to programs?	1	2	3	4	5
2.5	How sufficient is your distance education program to meet your needs in terms of acquiring relevant qualifications?	1	2	3	4	5
2.6	How sufficient is your distance education program to meet your visual needs?	1	2	3	4	5
2.7	How sufficient is your distance education program to meet your needs in terms of ease of use?	1	2	3	4	5
2.8	How sufficient is your distance education program to meet your needs for ease of understanding?	1	2	3	4	5

PART – III

COMPARISON OF DISTANCE EDUCATION

(Advantages of Distance Education)

QUALIFICATIONS		CRITERIA				
		A Lot	Pretty Much	Neutral	Poor	Not At All
3.1	How appropriate do you find distance education to be accessible to students who do not have face-to-face learning opportunities?	1	2	3	4	5
3.2	How appropriate do you find distance training is appropriate for the reduction of education costs?	1	2	3	4	5
3.3	How appropriate do you find distance education to increase the number of qualifications in education due to the fact that distance education is a decentralized system?	1	2	3	4	5
3.4	How appropriate do you find distance education to be sustainable?	1	2	3	4	5
3.5	How appropriate do you find distance education to be able to transfer technological developments faster?	1	2	3	4	5

3.6	How appropriate do you find distance education to ensure that distance education is equally beneficial to all individuals?	1	2	3	4	5
3.7	How appropriate do you find distance education for individual and independent learning and mass education, when individuals need different training and where the current education system cannot afford it, by developing new possibilities?	1	2	3	4	5
3.8	How appropriate do you find distance education for the elimination of disruptions to traditional education practices and the creation of new options?	1	2	3	4	5
3.9	How appropriate do you find distance education for creating new models and creating educational opportunities for individuals outside of current education?	1	2	3	4	5
3.10	How appropriate do you find distance education to be an opportunity to communicate effectively between students and educators living in different countries of the world?	1	2	3	4	5
3.11	How appropriate do you find distance education to be affordable for students to benefit from the educational opportunities of the universities in different countries of the world?	1	2	3	4	5
3.12	How appropriate do you find distance education for students who are experiencing psychological problems (eg social phobia) and for being in the education system?	1	2	3	4	5

PART – IV

COMPARISON OF DISTANCE EDUCATION

(Disadvantages of Distance Education)

QUALIFICATIONS		CRITERIA				
		A Lot	Pretty Much	Neutral	Poor	Not At All
4.1	How appropriate is the distance education model for some students not being able to access required facilities? (Computers, internet connection etc...)	1	2	3	4	5
4.2	How much the changes in communication methods does affects the education?	1	2	3	4	5
4.3	How much the infrastructure changes does affects the education plans?	1	2	3	4	5
4.4	How appropriate do you find distance education to provide additional responsibility for affecting the teacher's responsibility field.	1	2	3	4	5
4.5	How appropriate do you find distance education in terms of face-to-face interactions environments and possibilities that are important in learning environments?	1	2	3	4	5
4.6	How appropriate do you find distance education to failure to solve learning difficulties immediately in the learning process and in term of the inconvenience that may arise after this?	1	2	3	4	5
4.7	How appropriate do you find distance education in terms of planning difficulty for individuals who do not have self-study habits and whose skills are not developed?	1	2	3	4	5

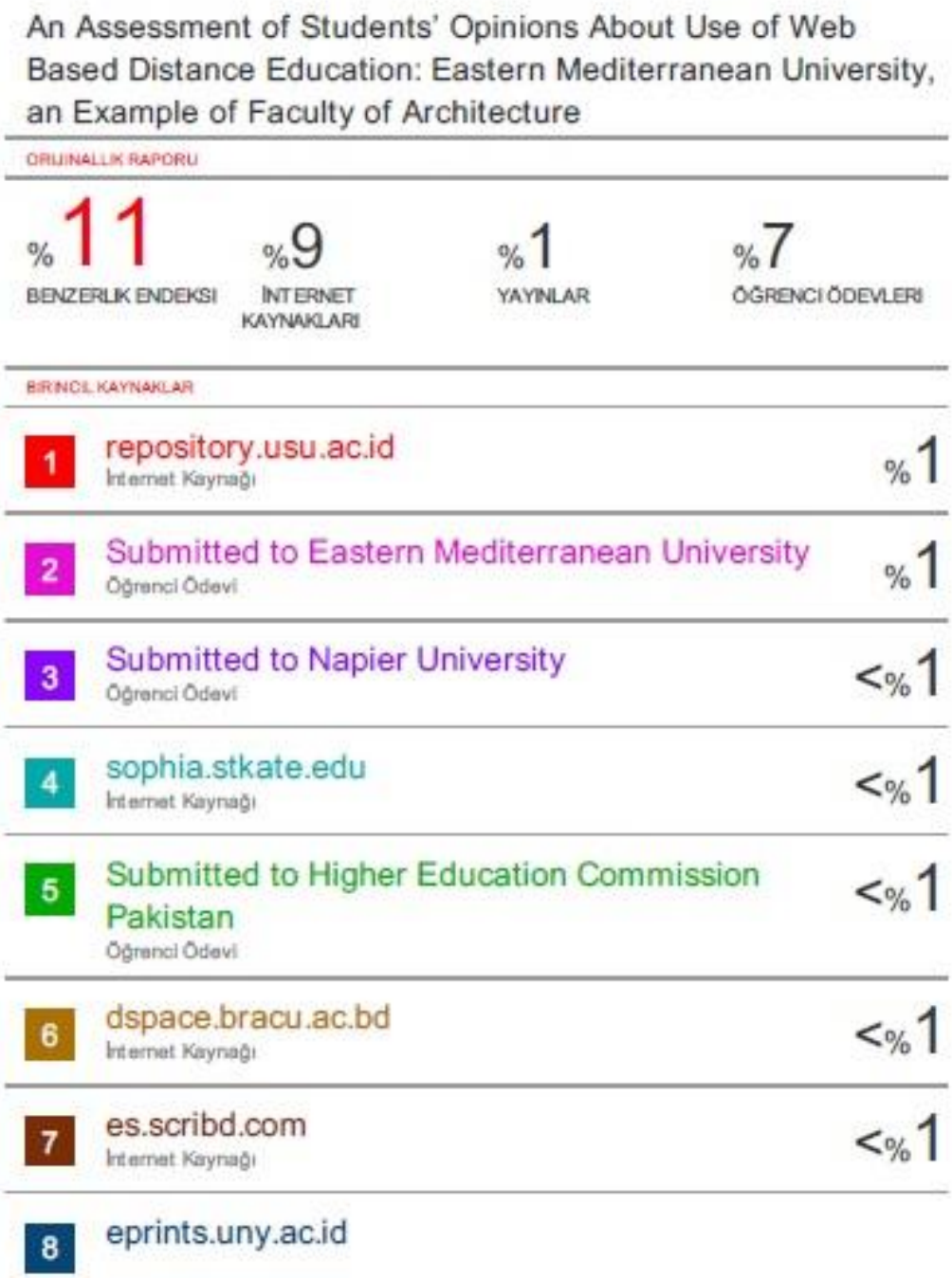
PART – V

IMPORTANCE OF DISTANCE EDUCATION

QUALIFICATIONS		CRITERIA				
		A Lot	Pretty Much	Neutral	Poor	Not At All
5.1	How appropriate do you find distance education in terms of the possibility of giving more training at the same time?	1	2	3	4	5
5.2	How appropriate do you find distance education to provide opportunities for students to increase their learning opportunities and alternatives?	1	2	3	4	5
5.3	How appropriate do you find distance education in terms of removing the physical distance from the education process?	1	2	3	4	5
5.4	How appropriate do you find distance education in terms of being able to reach the target group more quickly	1	2	3	4	5
5.5	How appropriate do you find distance education in terms of speeding up the education process?	1	2	3	4	5
5.6	How appropriate do you find distance education in order to make the students more active?	1	2	3	4	5

THANK YOU FOR YOUR HELP

Appendix D: (Turnitin Report)



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ORIJINALLIK RAPORU

%11	%9	%1	%7
BENZERLIK ENDEKSI	İNTERNET KAYNAKLARI	YAYINLAR	ÖĞRENCI ÖDEVLERI

BIRINCIL KAYNAKLAR

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