Abstract
Recent advances in technology have radically changed the view of education. Today, there are millions of distance learners in the world. For example, United States (US) has had rapid growth in the use of technology for distance education. Like US, Turkey as a developing country and tries to develop its educational system. As there is no significant difference found between distance education and traditional way of education (Lockee, Burton & Cross, 1999), it provides learners a new avenue to develop their knowledge, get certificates, and take courses online. Therefore, there have been many studies carried out in distance education in the world and in Turkey. Especially on design and development of courses and programs via web-based education have started in the governmental universities as well. Some of the private universities are also seriously conducting their studies on distance education. For all of these studies, many articles have been published and many theses have been written. Based on these researches, this paper examines distance education in Turkey, its past, its current situation, and especially its future. How distance education has grown up, how it is growing, and what things are going to happen will be discussed and some suggestions for future reference will be given in this paper; therefore, some of our advantages and disadvantages in terms of distance education will also be examined.

Key words: Distance education, educational technology, Turkish educational system.

Introduction
The technologies used in education are generally developed for other purposes. Mostly they are not designed just for educational purposes. For example, the use of computers in education was not the main purpose of computers. Nevertheless, educators have leveraged the developing technologies in education.

In Turkey, there have been many studies carried out in distance education; especially on development of courses and programs via web-based education have started in the governmental universities. Some of the private universities are also seriously conducting their studies on distance education. For all of these studies, many articles have been published and many theses have been written. Before starting to talk about these studies, the definition of distance education is given, and then the distance education in Turkey is examined; and finally suggestions will be given for the future of distance education in Turkey.

What is Distance Education?
The terms "distance education" and "distance learning" have been used interchangeably for years by many researchers, but actually they have the same meaning and goals. There is a continuing discussion on which term
should be used with the pedagogical arguments centering in on the words "learning" and "education". Education incorporates a systematic approach to learning, including the institution and the creation of a collaborative learning environment (Stenerson, 1998). Institutions and instructors control educational delivery while the student is responsible for learning. In other words, distance learning is the result of distance education. Since it is going to be focused on to analyze the distance education in Turkey, the term preferred, and used will be distance education. Sherry’s definition (1996, p.337) of distance education “its hallmarks are the separation of teacher and learner in space and/or time (Perraton, 1988), the volitional control of learning by the student rather than the distant instructor (Jonassen, 1992); and non-contiguous communication between student and teacher, mediated by print or some form of technology (Keegan, 1986; Garrison & Shale, 1987)” is considered the general definition throughout this paper. There are many definitions of distance education in literature; though, the basic concepts of them are basically similar. Whenever there is an improvement in technology and instructional technology, this forced the researchers to give a broader definition of distance education. For example, distance education has traditionally been defined as instruction through print (i.e. by mail or textbooks) or electronic media to the learners who are engaged in learning in a place or time different from that of the instructor or instructors; however, this definition of distance education is being changed because of the new technological developments which make teachers and instructional designers to change the idea of distance learning. Technology provides more individualistic learning thanks to its opportunities which also enhance the quality of distance education in these days.

For my understanding, distance education is a system and process that connects learners and instructors with educational resources from various geographically separate places using a variety of different media. Students and instructors are separated from each other by either distance or time. Many different technologies are currently used to link the instructor and student. There is two-way communication available among the learner, instructor, and other learners either through print or some form of electronic media. Correspondence courses were the first initiative of distance learning which date back to the 1800’s with students receiving letters from their instructors, completing prescribed assignments, and sending back to the instructor for written feedback. Since that time, however, telephone lines, satellites, video and other electronic advances have made it possible to communicate with any number of individuals or groups in remote areas at relatively little expense. Courses are offered via videotape, broadcast television, satellite, interactive video, audio tapes, audio conferencing, CDROM, and, increasingly, computer networking - including e-mail, the Internet, and world wide web. Now with the help of computers, learners can finish their formal education from their homes using the time flexibility by drawing information from the traditional and online sources.

As we mentioned before, recent advances in technology have radically changed the view of education. Today, there are millions of distance learners in the world. For example, United States has had rapid growth in the use of technology for distance education. Like US, Turkey as a developing country in the world tries to develop its educational system; therefore, in this paper specifically the distance education in Turkey, its history and what things can be done for future will be examined and covered in the next section.

**Distance Education in Turkey**

Although distance education has existed for over 170 years in the world, it was introduced to the Turkish educational system almost 60 years ago. However, Turkish ministry of education and most of the educational institutions have been following all new applications and trends in distance education closely in order to develop the current distance education system.

Turkey applied distance education with respect to the social and economic conditions of the country. There are some reasons why distance education was introduced to our educational system so late. For example, especially between 1927-1955, distance education was discussed as a concept (Odabasý & Kaya, 1998; Agaoglu, Imer & Kurubacak, 2002). In 1927, in order to increase the Turkish literacy, national education problems were being discussed, a distance education model, “correspondence course” was offered in a meeting. However, the offer, in spite of considerable concept, could not be realized due to the conditions at that time (Alkan, 1987). This might be because of the fact that in those years the illiteracy rate was almost 90%, so without having a real teacher, teaching reading and writing might have seemed to be impossible.

In Turkey, we can formally state that the beginning of distance education has started in the late 1950s. In 1958, Correspondence Course Center (CCC) was formed by the Ministry of Education. An education technology strategies and methodologies committee was formed in this center (Alkan 1987). In 1961, CCC offered correspon-
dence courses such as technical skills courses for adults and preparatory courses for learners who were entering the exams from distance (Agaoglu et al., 2002). In 1960s among the scholarships that US gave to Turkey, there was a scholarship for Education for Radio. A couple of learners went to US and had their training for few years and came back to Turkey. Then education with the radio department was founded in 1963 (Beyhan, n.d.) for elementary school kids; however, the quality of this education was not good enough.

In 1966, CCC was organized as a department and offered distance education in technical fields such as radio, hotel management, nutrition, typing, technical drawing, economic cooperatives, and electric (Alkan, 1987). Television has become one of the most effective instructional technologies (Saglik & Ozturk, 2001) used in Turkey and started in the 1970's for foreign language instruction. The main objective was to support students in learning English, German, and French (Turkmen & Pedersen, 2005). In the 1970s, social pressure increased the demand for higher education and it affected the distance education; however, correspondence education was cancelled by the ministry because of the two reasons; first, only the printed material was used and it was inefficient for learning only; second, the political and economical condition that Turkey was going through in those years were more important than distance education even education itself; therefore, it was considered as unsuccessful by academicians in 1975 (Odabasi & Kaya, 1998). The interest of using technology in education continued, though. In 1981, nation-wide literacy campaign and higher education act were accepted by the National Assembly, and the universities were charged to start distance education. Television had an important affect on literacy in those days. In 1982, the Open University was formed by Anadolu University and started its first distance education. From that time onwards, the Open University (AÖF-Açık Öğretim Fakültesi) and the open high school (AÖL-Açık Öğretim Lisesi) provided courses to thousands of students increasingly every year. Anadolu University opened a new era in the country in terms of distance education. In their first 1982-1983 academic year, Open University of Anadolu University had 29,479 students enrolled in business administration and economics course (Ozkul, 2001). Printed materials and broadcasting developed by faculty members were the main instructional methods in those days.

The “Open High School” application that was started in 1993 by means of the channel of Ministry of National Education Film, Radio and Television Education Presidency (FRTEP) and to which today about 160,000 students are enrolled, is one of the comprehensive programs on distance education that is applied in our country (MEB, 2010). In 1998-1999 academic years, Open University reached 650,000 students in 18 programs (Agaoglu et al., 2002). Anadolu University has also been trying to offer on-line alternative courses for its on-campus students in order to see how feasible, effective, efficient, and appealing it is to offer on-line programs. They have also established a foundation for a "virtual" university in 1998 (Turkmen & Pedersen, 2005).

Besides Anadolu University, many other universities such as Middle East Technical University, Sakarya University, Bilgi University, Anadolu University had 29,479 students enrolled in business administration and economics course (Ozkul, 2001). Printed materials and broadcasting developed by faculty members were the main instructional methods in those days. In December 1999, a new code was accepted and the Council of Higher Education (YÖK-Yüksek Ögretim Kurumu) formed a National Informatics Society, and within this context regulations for distance education were prepared. One of the purposes of this regulation is to involve distance education in the current traditional education system. For this, Institutes of Informatics were formed in the universities. On the other hand, the effects of the technologies on our education system, not distance education, can be seen from the department of Computer Education and Instructional Technology (CEIT) which was established in many universities to train and educate the prospective teachers with the ability to use the newest technological tools in education to both teachers and students. Nowadays, many Turkish universities are developing their own distance education environments.
because of the fact that they have realized the importance of distance education and there is good money in distance education courses.

As we see in Fig. 1, from 1993 to 2005 in 12 years, there was 55% increase in the number of undergraduate students in Open University. There were almost 700,000 students enrolled in Open University in total. It is one of the biggest open university in the world and it was serving 7 undergraduate and 20 associate degree programs in 2006 (YÖK, 2007). In 2006-2007 academic year, open education programs had 845,411 registered students which is a significant indicator of the development of distance education in Turkey.

![Fig. 1: Students who enrolled open education in Turkey according to years (YÖK, 2007).](image)

Currently in almost 41 both private and governmental universities, the department of Computer Education and Instructional Technology exists and new departments are still being opened in other universities. In Open University at Anadolu University, currently there are 1,363,571 registered distance education students. In total, it can be said that there are more than 2 million students who are taking distance education courses in Turkey. Table 1 shows the current total number of students who are studying in open education at the university level.

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<th>Table 1: Summary table of number of students in open education in all universities in 2009/2010 academic year in graduate level (ÖSYM, 2010).</th>
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**Suggestions for the Future of Distance Education in Turkey**

In general Turkish distance education provides learner-content interaction through one-way technologies. The need for two-way technologies is clear for more effective learning environments. By applying instructional strategies and interactive technologies that are inspired by cultural context, distance education can also enhance learner-instructor, and learner-learner interaction. For this gap, video conferencing is important feature in distance education; therefore, Open University is almost to finalize its trial studies on video conferencing to be integrated with the system. In the near future, online conferencing will be more common in university institutions and it will be much easier and cheaper. Synchronous conferencing systems of the future will consist of a basic platform from
which users can choose to conference using a variety of tools: video, audio, text based chat, and whiteboard. Additionally, such systems will support file transfer, remote launching and control of applications, and more. These systems already exist; what is lacking is only the bandwidth to use them effectively (Downes, 1998).

The bandwidth for distance education courses should be increased to give especially synchronous and asynchronous courses effectively. Bandwidth limitations preclude the use, in many settings, of innovative Java applets, multimedia, video and videoconferencing. Videoconferencing is a real time video session between two or more users or between two or more locations. Videoconferencing over IP should become more common.

Educational resources are becoming open to everyone, free to use which makes education more competitive and at the same time more effective. MIT’s “open educational resources” for example is a good example in this respect.

The government should attempt to bring the opportunities of its wealthy, industrialized western region to the mostly agrarian, sparsely populated eastern part of Turkey in order to enhance learning and educational level. It should provide more distance education for people who cannot afford to go to the universities or who do not have enough time or who cannot go to higher education schools.

General approach for distance education should be changed with more advertisements through TV and other types of ads; because, the common sense for distance education is not good in Turkey, people do not get used to take courses online but in other countries like US most of the learners try to take more distance courses.

Most of the people use mobile technologies such as mobile phones in Turkey very often. There are 61.5 million customers who are using mobile phones in Turkey which is more than 85% of the total population; therefore, applications which can provide to reach mobile learning management systems should be produced and given for free to the learners so that they can study whenever and wherever they want as 11.4 million people are using 3g network with their phones (BTIK, 2010). Stephen Downes (1998) suggests that the PAD (Personal Access Device) will become the dominant tool for online education, combining the function of book, notebook, and pen.

Presenting should be more enhanced and productive for the learners. They will become full-featured and easy to use. The speed of internet and capacity will probably enhance the instructional designer’s ability to present more effective learning materials. For example, virtual environments can be used in distance education today in Turkey. Multi user virtual environments (MUVEs) can enhance social presence of learners and MUVEs will probably be moved to the personal digital assistants (PDAs) so that anybody can use and join the learning process.

Distance education courses should be much more topic-based. There should be many different types of courses so that learners can specialize on their skills. The topic selection for an individual’s education should be based on that student’s need, not the preselected curriculum for a particular class. Any given student may at any time be taking any given topic, and progressing at a pace through that material appropriate to his or her learning ability (Downes, 1998).

Learning management systems (LMS) are the main environment for learning in distance education. Coordinating student progress through various learning materials, tracking their grades, and facilitating interaction they are all provided by instructional management systems. These systems are always evolving and have gained wide acceptance in the community of distance such as Scholar, Blackboard, Virtual U…etc. With the development of online technologies, future LMS will become much more sophisticated and will include multimedia environment; therefore, enough consideration should be given to develop open source free learning management systems to enhance distance learning environments.

There should be more technical support for instructors and learners in distance learning environment. Even with many supports in place, it is likely that students will experience some frustration from time to time depending on the functioning of the equipment. The tech support should be able to connect to the computers and fix the problems at a distance whenever needed in order to decrease this frustration. In Turkey, instructors are fully responsible for everything and it should not be the case anymore; but the instructors should just focus on how to give the best course with best design rather than handling with technical problems.

The key to effective distance education is focusing on the needs of the learners, the requirements of the content, and the constraints faced by the teacher, before selecting a delivery system. Because of these reasons, distance education programs must be carefully planned by understanding of course requirements and student needs. Appropriate technology can only be selected once these elements are understood in detail.

Students living in rural areas often choose distance learning because of the lack of educational programs within their area. Distance education should provide libraries and research facilities through online environments, access to
journal articles through web links and University library services. For these and other reasons, the number of courses available to students through distance education should be increased. Furthermore, the degrees offered in distance education to the students in our country is also very few; therefore they should be increased as well.

Besides that the opportunity to transfer the credits from one institution to another should be considered within the accreditation which is a whole topic. It is likely that the availability of courses and degrees will increase the demand for such offerings.

Conclusion

Turkey is still behind when it is compared with US and Europe in distance education in terms of technologies and systems. Turkey has the largest distance education university on earth with almost 1,500,000 students. However, technology cannot alone improve the quality of education, but it can be an effective medium when it is integrated with suitable curriculum and instruction. Turkey has a massive young population and these people should be educated well enough to develop our country and the higher education system in Turkey is still in trouble despite developments in the system. Therefore, good design of distance education courses are important, teachers should be prepared to use right technology in order to increase student engagement and student learning as measured in a variety of ways. People in Turkey, according to my observations, do really want to get in touch with technology all the time; so, when technology used appropriately, it can help students become active, independent learners with access to seemingly unlimited information.

References


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