

## **A Case Study of Organizing Distance Education: Anadolu University**

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### **ABSTRACT**

Distance education is a sort of education that learners and instruction are away from each other. With this characteristic, distance education provides educational opportunities for everyone, at any place, time or age.

In this article, the practice of distance education in Turkey is critically examined, especially at Anadolu University. The practice of distance education at Anadolu University started in 1982 at the Open Educational Faculty (OEF). Today, Anadolu University that aims the teaching with contemporary technologies has 227 course. The ultimate goal of Anadolu University is to reach every student by means of contemporary technologies such as Internet. All the projects executed at Anadolu University are collected within a master project called "Open Education 2000".

**Keywords:** Open Education, Turkey, Anadolu University, Distance Education.

### **INTRODUCTION**

As a result of the fact that societies have realized the importance of education, educational activities that had been informally dealt in the early ages have become more systematic. Education, which is accepted as one of the basic human rights, requires societies to construct educational institutions (Daniel, 1998).

In the beginning, educational organizations and traditional educational environments were relatively sufficient. On the other hand, increasing educational need of an individual due to social, economical and scientific developments have become insufficient. Moreover, apart from childhood and teenage period, in the mature period, individuals' requirement of education, which they have not noticed before, limits the time they could spare for education.

Distance education is a sort of education that learners and instruction are away from each other. With this characteristics, distance education provides educational opportunities for everyone, at any place, time, date or age. Although teaching and learning people are far away from each other in distance education, they could hold instructional activities at a pre-defined time period simultaneously. This is done by means of data procession and communication devices. It is possible to define distance education in many ways. Without going into detail, the main characteristics of distance education can be summarized as below:

- 1- In most of the education process learners and teachers are away from each other.
- 2- Special media devices are used to connect learners and teachers and to communicate the course content.
- 3- Special data procession and communication devices are benefited to provide two-way communication between the learners and the teachers.
- 4- An effective educational management is established for student assessment (Verduin ve Clark, 1994).

Distance education which requires a special education and teaching envisagement, special teaching techniques and communication methods, also requires a special organization and method because in formal education, which requires relatively homogeneous learner groups, indicates heterogeneous characteristics in distance education. The target mass in distance education can be either an adult group that each of whom has different conditions and opportunities or students who are at their basic education age or university students.

Besides showing such a big difference of target mass which is admitted as the most important component in education process, learners and teachers being in a different environment can limit the teacher's affect. To eliminate the negative results of this, the management of institution which gives distance education has special importance. The economic and social alterations that target mass can be influenced must be followed. Especially, by following the developments in communication technology, the learner's learning needs be received more effectively, proper teaching materials and environments can be prepared and presented.

The questions that will be answered in the envisagement and production of distance education must be as follows:

- Which content how much will be given?
- How will the content prepared?
- In which environments and how the content will be transferred?
- What will be the teaching strategies?
- How will the learning measured?
- What will be the ways of receiving feedback?

Which methods will be used in the production of materials?

There is no right or wrong technology in distance education. Each of them has advantages and disadvantages in the process of selecting the environment.

## **DISTANCE EDUCATION IN TURKEY**

Distance education has been employed in the Turkish Education System during three prominent periods: 1927-1955, 1956-1981 and After 1980s'. These periods are characterized by the following issues; intensive debate on distance education as a concept, employment of distance education at secondary and higher education levels, system-shut down, foundation of Council for Higher Education (CHE), re-employment of distance education in higher education, and later in secondary education.

In 1927, in a meeting where national education problems were being discussed, a distance education model, "correspondence course" was offered to increase national literacy. The offer, in spite of considerable concept, could not be realized due to the conditions at that time (Alkan, 1987). One of the most important reasons of this skepticism might have been the impression that it would have been unrealistic to teach reading and writing without a teacher to a population with a 90% illiteracy rate.

From 1935 to 1955, distance education was brought to the agenda of public opinion from time to time but no action was taken. Therefore, the period between 1927-1955 can be regarded as the period of argumentation for distance education as a concept.

In 1958, Correspondence Course Center (CCC) was founded within the Ministry of Education (MOE). In 1961, CCC offered correspondence courses such as technical knowledge courses for adults and preparation courses for those taking external exams.

Another application for distance education in Turkey during this period is the "School Radio" that has been in practice since 1963. The program is for primary school students and is prepared by Ankara Provincial Radio (Ustunoglu, 1987).

In 1966, CCC was organized as a department and realized efficient applications. The department offered distance education in technical fields such as radio, hotel management, nutrition, typing, technical drawing, economic cooperatives, and electric. In addition, programs were offered to prepare applicants for several exams which included primary school teaching and technical school graduation exams, as well as for preparation for a diploma program (Alkan, 1987).

In the 1970s, social pressure increased the demand for higher education. As a result, distance education gained more importance in the higher education level, which in turn triggered important changes in distance education. The first of these changes was the foundation of the Correspondence Course Center within the body of MOE. The CCC aimed at providing tertiary education for the students who could not enter a university. At the same time with the foundation of CCC, an educational Technology Strategy and Methods Committee was organized. The committee's functions were determined as follows;

- To make use of instructional multimedia models and develop a contemporary distance education system.
- To create new resources and technologies for distance education.
- To realize scientific and experimental research to obtain radical solutions to the problems (Alkan, 1987).

The second development in this era is the foundation of another distance education institution: The Pilot Teacher Training College.

The main initiative in the foundation of this institution was to create a contemporary distance education institution in Turkey. However, as these enterprises were confronted with negative attitude both by academicians and public opinion, the applications were limited only to teacher training. Between the years 1974-1976, students who completed their secondary education are offered teachers training via distance education. During the first year of this education, only printed material was used as a teaching source.

Towards the end of 1975, inefficiency of using only printed material was observed and The Informal Higher Education Institution (IHES) was founded. Thus, the students who had started training in 1974, joined this institution and in 1975 the number of students in IHES totalled 85.122. IHES realized correspondence courses, open higher education, external exams and formal higher education programs. Printed materials, television, radio, cassettes and records were used in these programs, also limited academic counselling was provided.

In a study conducted by the IHES Planning Programming and Evaluating Department, during the educational year 1975-1976, only 12% of the students were found to have been following the radio and television broadcasts and using the cassettes (Alkan, 1987). In the same year, it was emphasized that the programs were not well balanced and IHES did not achieve efficient ties with supporting organizations (Okan, 1976). A 1978 study also showed that IHES had many problems related to administration, faculty, programs, media and the methods used (Erçan, 1978). However, the effort for the use of modern technology in education continued. In 1981 a nation-wide literacy campaign started. Television school programs aided literacy a great deal.

Another development in distance education in Turkey occurred in 1981. In that year, the Higher Education Act transferred the responsibilities of distance education for higher education to universities.

### **Anadolu University**

In 1982, Anadolu University began distance higher education in the preserve of its Open Educational Faculty (OEF), OEF started programs in Business Administration and Economics with a student enrollment of 29,479 for the 1982-1983 academic year (Ozkul, 2001). Teaching resources in these programs were printed material, broadcasting and academic

counselling. Printed materials were mainly developed by faculty members, but co-authors from other universities assisted in writing as well.

In the 1982-1983 academic year, 20 minute television programs were broadcasted weekly for each course in the Business Administration and Economics programs. One year later, 30 minute radio programs started, with English being the first course offered. In the second term of the 1982-1983 academic year, academic counselling started in 16 provinces within the bodies of universities present in those provinces, 66% of OEF students were enrolled in academic counselling. 52 professors, 80 instructors, 72 research assistants and 5 specialist, took part in academic counselling (Serter, 1987).

OEF has a total of 650,000 students regarding the 1998-1999 academic year. It offers education in 18 different programs. These programs are as follows:

- Sales Management
- Office Management
- Banking and Insurance
- Business Management
- Public Relations
- Nursing
- Health Institution Management
- Tourism and Hotel Management
- Accounting
- Home Economics
- International Trade
- Social Sciences
- Public Administration
- Midwife Training
- Health Technician Training

Two other faculties within the body of Anadolu University, Business Administration and Economics, also give distance education. The Faculty of Economics offers distance education programs in Labour Economics and Industrial Relations, Public Administration and Public Finance. The Faculty of Business Administration offers programs in Accounting and Finance, Marketing and Management and Organization. As of February, 1996, 157,332 students were enrolled in the Faculty of Economics, and 206,225 students were enrolled in the Faculty of Business Administration.

Currently, four main teaching resources are utilized; radio-television programs, printed material, academic counselling and computer assisted instruction which started in 1995. The number of television programs has also increased following the increase in the number of courses. In 1996, the number of weekly broadcasted programs is 1650 hours for a year. Radio programs, which originally were available for only English courses, have been produced for German and French and the number of programs have reached 150 hours for a year. The Academic Counselling system has been enlarged to 75 provinces. Also the number of courses covered in academic counselling has increased (17 in 1996).

In 1995, OEF started the utilization of computer technology for instruction. The application was called the computer assisted advisory system (CAAS). CAI department of Anadolu University prepared a software for the courses: English, Mathematics, Statistics, Financial Management, Economics and Accounting. The software is written in a tutorial mode and consist of four main parts: practice, revision, sample problems and tests. As of 1996, CAAS is provided in 13 provinces in centers called CAAS labs.

### **Today**

The written and printed materials in distance education must improve the student's learning ability depending on learners' own characteristics. These are encouraging factors. The explanations of subjects in printed materials in short ways, with clear, comprehensive

writing language and with the component of form, graphic, photograph, etc. in distance education utilisation of central instrument broadcast vehicle is one way of operating of the system. The backbone of teaching is constructed on TV and radio programs and enriched by written and printed materials. Curriculums carried by TV programs are inspired by real life circumstances and this is especially visualised by computer animation models, supported analogies and case studies. And also with recording the broadcast it provides an opportunity to re-watch the prebroadcasts. Anadolu University with the aim of teaching with 3 studios which are compatible with current technology, for 227 lesson total 2026 TV programs, throughout 647 hours that TRT (Turkish Radio and Television-State's TV channel) assigns the transmission to students. These lesson plans are also in the scope of West Europe Project, transmitted to Turkish students in 6 countries of Europe. Besides TV programs with 103 programs for radio, it transmitted to students via TRT with 35 hours of period.

Face to face education is an activity that the lecturer in at university and students are together at the same time, at the same place, during a course in the classroom environment. As the most important drawback of distance insufficient teacher-student relationship, student-student communication can be solved with effective and systematic consulting.

As the effect of the recent technological developments in communication, computer aid plays an important role in distant learning programs. The face to face learning programme called 'Academic Counseling' being used by Anadolu University since 1982-1983, has been running in 56 city centers. 38 universities support this programme with their 110 professors, 60 associate professors, 149 assistant professors, 291 instructors and also with 70 instructors from Anadolu University. In addition, for students in western Europe, 22 instructors or specialists from Cologne, Munchen, Stuttgart, Frankfurt, Berlin and Hamburg has been assigned for academic counselling.

Item bank software is created to increase the speed of exam preparation process and also elevate the level of question quality step by step. With the help of this software the irregularities are reduced to minimum, and since the question specialists can spare more time to the content of the question rather than the irregularities, considerable developments have been achieved in improving the quality of questions. Again with the help of this software, after the exam, the answers can be used in statistical calculations involving reliability, item discrimination and validity, and specialists are able to review the questions and make necessary changes. This software consists of sub-software such as the input/output data software included in the item bank computers, and work stations used by the question specialists.

All source codes are written in C++ as item based in accordance with the architectural processor/server in Windows NT 4.0 environment. The use of personal computers lowered the system cost to a minimum and with the environment security strategies provided by Windows NT processing system the protection of the data is achieved (Senel, 1999).

Anadolu University has started Internet advisory service for students studying abroad. The aim is to let students ask questions about certain subjects to certain instructors and also view all the questions asked and all the answers given. In addition to this a discussion environment is created to allow other students to ask and answer questions. The techniques are used to form discussion lists for every subject. It is decided that only students which are abroad can subscribe for these lists.

The computer aided education softwares used in distant learning is prepared for the purposes of increasing the effectiveness of the lecture performed and to aid the activities performed in other environments. For this purpose computer aided processing center has been established at Anadolu University that can easily be accessed by students. These activities started in 1994, are in service in 14 city centers.

Video-conference is a communication technology where two or more parties can communicate both visually and audibly. 'Technological Knowledge Project' has been established in 1997 at Anadolu University and 'Local computer Web', 'Internet Web System', 'Satellite Communication System', 'Video-Conference System' has been put into service. Turksat 1-C satellite is being used for communication between Ankara-Turkistan. Since 1998, from the studios in Ankara lectures on subjects of Economy, Business Administration, Law, History, Turkish Literature has been performed in conference format. According to the agreement made by Anadolu University Open Education Faculty at the second half of 1998-1999 'Marketing' courses have been started via distant learning. With this method, students are prepared using books and video tapes before the class and then with interactive video-conference system they continue their education live, face to face with the instructor.

Beginning from January 1999 direct Internet, e-mail and fax connections between Turkistan and Ankara via satellite has been started. Students in Turkistan can have question and answer discussions with the instructor in Eskisehir over the Internet.

In the future, there will be studies to increase the capacity of the TV band. The video-conference system between Ankara and Turkistan is an interactive distance education activity. It was constructed by using 128 kbps satellite line. As a pilot study, a series of conferences between Ankara and Turkistan and 'Marketing' course between Eskisehir and Turkistan are actualized. Internet, fax and e-mail services can be provided by the same channel but the capacity is not sufficient for the actualization of Internet and video-conference activities simultaneously. The studies for the optimization of the system are continuing. The following factors must be considered for the optimization of the system:

- 4 hours time difference between Ankara-Turkistan
- Daily and weekly arrival traffic from Turkistan to Ankara
- Determination of time interval reserved for distance education
- Selection of programs which have primary importance for distance education system
- Arrangements for the adaptation of selected programs to distance education (Koksoy, 1999).

Some commissions were formed to reconstruct some educational activities and processes executed in different faculty, department and administrative sections of University: like instructional design commission, advisory service commission, distance education technologies commission. The aim of these commissions are to reconstruct an effective distance education system in 2000.

Undergraduate programs in the field of Preschool Teacher Education and English Language teaching will be started at 2000-2001 academic years.

### **Future**

The developments in the field of communication and informatic technologies are followed at Anadolu University. It is proposed to reach every student via Internet.

Open Education Faculty tries to enter 2000's a new project called: Open Education 2000. This project is evaluated as the next century's education system.

**Content of Programs** The Program's contents are updated according to the needs of the information society at 2000's. In this context, the priority is given to the various interests of the students at the program for this purpose, the programs in the fields of social sciences, natural and technical sciences, communication and education are developed.

**Computer-Assisted Instruction** Computer-assisted instruction (CAI) is also being a common tool in distance education. At Anadolu University this instructional technology is using in academic counseling system, but the current system needs to be modified. Therefore, there are the works of actualization' this system.

Internet, Automation and Student Communication Network: The financial supports for the concrete projects like providing every student a computer at Open Education Faculty are expected. By this way, students are supposed to get communication opportunities on a special network or Internet or TV channel.

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