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ATA ÖNAL[1], SEMİH ÖTLES[2]

[1]Department of Computer Engineering
[2]Department of Food Engineering
Ege University, Izmir, Turkey

A DISTANCE EDUCATION MODEL FOR TURKISH UNIVERSITY SYSTEM

Summary. The Turkish university system is reported to be of good standard, but many of the country's 54 universities have less to offer than one normally expects from a university. In addition to these universities, Turkey has a distance education system named "Open Education". We investigate a distance education model that uses internet facilities and try to integrate this model to the current "Open University Model" in Turkey. This paper gives an overview of the literature which leads to the model and a brief discussion on the design of the model at its current phase.

Key words: distance education, university system, education model

Introduction

Distance education can be considered a system of education which brings an effective solution to the discrepancy between the demand and supply in education (HOWARD et AL. 2004. It consists of communication technologies and adapted pedagogical activities for distance learners. Distance education makes the education of great masses possible. In traditional education students and teachers are required to be in the same classroom for learning to take place. With the progressive developments in communication technologies, it became possible to teach the students who are distant from school. Even traditional education has become a costly alternative to be used only on special occasions where it is required.

In fact, the distance education has a history of more than 100 years. In 1836, University of London carried out first distance education activity. But the method gained popularity after the 1970's. At the moment, many countries like Australia, Canada, China, Costa Rica, England, France, The Netherlands, India, Iran, Japan, Norway, Poland, Spain, and USA are using this method, especially in higher education.

The Turkish university system is reported to be of good standard, but many of the country's 54 universities have less to offer than one normally expects from a university. In addition to these universities, Turkey has a distance education system named "Open Education Faculty" (TEKIN et AL. 1988). The application in Turkey was started to provide higher education to distance students. We investigate a distance education model that uses internet facilities and try to integrate this model to the current "Open Education Faculty" in Turkey. This paper gives an overview of the literature which leads to the model and a brief discussion on the design of the model at its current phase.

The paper is organized as follows. In Section 2, we discuss the sample education models. In Section 3, we introduce our approach and propose an integrated solution to the *Open Education Faculty* in Turkey. Section 4 includes the conclusions.

Sample education models

The various distance education models differ in the locus of control over the pace and place of instruction. In some models, the faculty and institution have primary control, as is the case in a traditional classroom environment. In http://www.umuc.edu/ide/modlmenu.html, distance education models are divided into three categories: distributed classroom, independent learning, and open learning class. There are common issues like logistical support, student support, faculty support, evaluation, and laboratory experiences that must be considered in all these different distance education models.

In distributed classroom model, telecommunication technologies extend a classroom- based course from one location to a group of students at one or more other locations; this classroom mixes on-site and distant students. The faculty and institution control place of instruction http://www.umuc.edu/ide/modlmenu.html.

In Independent learning model students free from having to be in a particular place for the lesson. Students can access a variety of materials, including a course guide and detailed syllabus. Students and the instructor communicate by one or a combination of the following technologies: telephone, voice-mail, computer conferencing, electronic mail, and regular mail.

Open learning class model involves the use of printed course materials and other media (such as videotape or computer disk). In this model student study at his or her home, he or she participate group meetings with the usage of interactive telecommunications technologies.

There are different distance education applications based on these classified models in different countries (LOBO 2000). One of these applications is the distance education sample in Maldives (SKAAREF 2003). The small population sizes of the Maldives islands inhibit infrastructure developments and face-to-face education. The research mentioned in (SKAAREF 2003) looks into the possibilities of using distance education in Maldives to move towards the goal of "Education for All". This proposed education model for Maldives is based on independent learning model. The system contains three different modules: the student module, the regional module, and the headquarters module. Each student has the student module, the regional module is set up in each of the regional centers, and the headquarters module resides at the central location (SKAAREF 2003).

Once the student module is installed in the student's computer, a profile for the student is created. This is stored in the hard disc and it is used to record the student's progress and give feedback. The student's module has a database which contains navigation, new problems, student behaviour, notorious case and granularity. The regional module is the intermediary between the student module and the headquarters module. All updates from the headquarters are uploaded into the regional module. The regional module sends these updates into the student module and vice versa. The headquarters module is the authoring tool. It controls the whole system (SKAAREF 2003).

The distance education model named *Open Education Faculty* in Turkey is a kind of independent learning model. Students are provided a variety of materials, including a course guide and detailed syllabus. The course books and materials are sent to every registered student and there is also a television channel that broadcasts the lessons according to the syllabus of the *Open Education Faculty*. The students registered to the *Open Education Faculty* use these course materials and watch the lessons broadcasted from the television channel. At the end of the semester, students have examinations at the exam centers. There is no access to a faculty member who provides guidance, answers questions, and evaluates student's work. The students are on their own during the semester and studying for the exams. The exam system is paper based and it takes long time to evaluate the exam results and there is not enough feedback to the students about the exams.

Apart from Open Education Faculty, there are different distance education applications in Turkey. Such as in Sakarya University, pre-graduate, E-MBA and Certification programs are offered to students (http://www.ido.sakarya.edu.tr).

Middle East Technical University (METU) is serving information technologies certification program within the context of Internet Based Asynchronous Distance Education project. METU Foreign Languages Department also gives foreign language distance lessons (http://www.odtu.edu.tr/academic/online.php).

Bilgi University (http://www.bilgi.edu.tr) and Cukurova University (http://ibsumer.cu.edu.tr/ue/) have e-MBA programs; Selcuk University (http://www.selcuk.edu.tr/suzep/) has a Turkish History, a Turkish Language and an English Teaching programs, Ankara University have distance Turkish Teaching lessons with TOMER (http://www.turkish-center.com).

All of these programs are an example of Independent learning model. And whole programs are implemented with the usage of internet technologies.

Proposed education model

The Turkish university system is reported to be of good standard, but many of the country's 54 universities have less to offer than one normally expects from a university. In addition to these universities, Turkey has a distance education system named "Open Education Faculty" (TEKIN et AL. 1988). The Open Education system is not computer based. It contains textbooks and television programs.

To make self – study of material easier is the main concern in preparing textbooks of the Open Education Faculty. The textbooks consist of teach units which have an outline

and suggestions for the learner (TEKIN et AL. 1988). The new concepts introduced in the unit are reiterated at the end, and suggestions are made for further reading. The unit ends with a test. This entire context is aimed at providing the reader to gain of control of his or her learning. It is very important for the student to take full responsibility for his or her own learning (TEKIN et AL. 1988).

Educational Television and Radio Production Center (ETV) of the Open Education Faculty produces approximately 300 television programs and revises the same amount each academic year (TEKIN et AL. 1988).

This system is not computer based and contains text materials. At the end of the semester, students have examinations at the exam centers. There is no access to a faculty member who provides guidance, answers questions, and evaluates student's work. There is no enough feedback to students about the courses and exams. Broadcasting the lessons on a television channel is another problem because students cannot get the lessons on whatever they need. There is no access to the past lessons.

We propose a distance education model that uses computer and internet facilities and try to integrate this model to the current "Open University Model". Integrating these facilities to the current system will work the mentioned problems out. We propose to transform the text materials to the online materials, deliver and update them over the Internet. The lessons on television can be broadcast over a computer network by using software. This will solve the problem about accessing the past lessons. Our proposed system contains four different modules: the lecturer module, the student module, the regional module, and the headquarters module. Each student has the student module, the lecturer module is installed in the each lecturer's computer, the regional module is set up in each of the regional centers, and the headquarters module resides at the central location. The responsibilities of the modules in our proposed system have some similarities and differences with the system in Maldives (SKAAREF 2003).

Once the student module is installed in the student's computer, a profile for the student is created. All updates from the headquarters are uploaded into each student's and lecturer's modules. The regional module is not the intermediary between the student module and the headquarters module. It is a module for delivering exams to the students. There will be exam centers in every region and students will have the assigned formal exams in these centers. The exams will be computer based and the regional module will be installed in every exam center. This module will be responsible to control the formal exams. The lecturer module is responsible to control the lecturer processes like preparing questions, exams and the course content. It also has a communication infrastructure to enable the communication between the lecturers and students. The headquarters module is the authoring tool. It controls the whole system and provides feedback and solutions. Figure 1 shows the modules and the relations between these modules in our distance education model.

Headquarters module in Figure 1 is the main module in our system. It contains an authoring tool for student's and lecturer's access. The lecturer module communicates with the headquarters module to build lecture content. The lecturer's module enables lecturers to prepare the questions and assign these questions to the exams. The headquarters module stores this exam records and sends the exam questions to the regional module. A lecturer assesses the students' progress and provides feedback.

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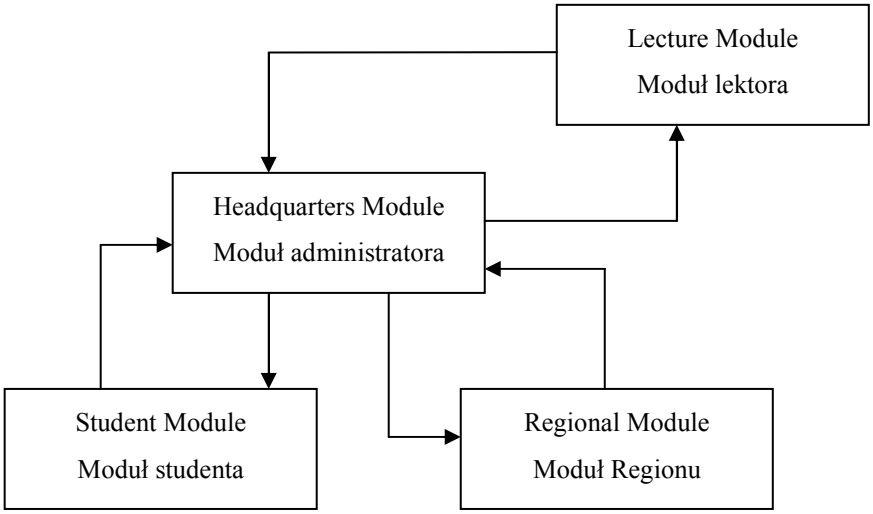

Fig. 1. Modules and their relationships
Rys. 1. Moduły i ich wzajemne zależności

The student's module is sent to students. The student can either install the software into his/her computer or use computers at the regional center. The student should use the regional module to have formal exams and use the student's module to access the online course materials. For each student a unique profile is created. The profile is used to authenticate the student in the system. All student activities are logged in this profile.

The Headquarters Module

The headquarters module controls the whole system, checks updates and manages other modules. The responsibilities of the headquarters module are:

- register student and lecturer,
- add a new course,
- prepare new exams and their delivery to the regional modules,
- downloading and evaluating the exam results,
- constitute an intermediate layer to enable the communication between the student and lecturer modules,
- take reports,
- technical support,
- lecturer's and student's authentication and authorization,
- lecturer's and student's activity logging,
- software's update,
- provide communication channels such as chat and e-mail servers for students and lecturers,
- update student's and lecturer's profile.

The Lecturer Module

The responsibilities of the lecturer module are:

- prepare the course syllabus and course content,
- enter questions, and assignments,
- provide communication channels such as chat client and e-mail client,
- control student's progress and grades,
- schedule the flow of the course for each student.

The Student Module

The responsibilities of the student module are:

- access the course materials,
- provide the communication between students and lecturers,
- provide online meeting facilities,
- upload the assignments to the system,
- online and offline access,
- access to past courses,
- provide team work.

The Regional Module

The responsibilities of the regional module are:

- download the questions,
- apply the exam to the students at the regional centers,
- upload the answers to the headquarter's module.

Conclusion

In this study, we investigated an integration of a computer based distance education model to the current paper based model named *Open Education Faculty* in Turkey. We propose a distance education model that uses computer and internet facilities. Integrating these facilities to the current system will work the mentioned problems out. The current system is not computer based and contains text materials. At the end of the semester, students have examinations at the exam centers. There is no access to a faculty member who provides guidance, answers questions, and evaluates student's work. There is no enough feedback to students about the courses and exams. Broadcasting the lessons on a television channel is another problem because students cannot get the lessons whatever they need. There is no access to the past lessons.

In our work, we propose to transform the text materials to the online materials, deliver and update them over internet. The lessons on television can be broadcast over a computer network by using software. This will solve the problem of accessing the past lessons. In our future work, we will extend our distance education model with external modules like library module.

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MODEL ZDALNEJ EDUKACJI DLA SYSTEMU UNIWERSYTECKIEGO W TURCJI

Streszczenie. Turecki system szkolnictwa uniwersyteckiego jest uważany za charakteryzujący się dobrym poziomem. Jednak wśród 54 uniwersytetów działających na terenie Turcji, wiele jest w stanie zaoferować mniej niż można oczekiwać od uniwersytetu. Niezależnie od działalności wyższych uczelni, Turcja ma system kształcenia korespondencyjnego (zdalnego) pod nazwą „Open Education/Edukacja Otwarta". Przebadano model zdalnego kształcenia, w którym stosuje się narzędzia oparte na Internecie, i podjęto próbę zintegrowania go z obecnym tureckim „otwartym systemem uniwersyteckim". Praca przedstawia przegląd literatury oraz krótką dyskusję na temat struktury budowy tego modelu w obecnej jego fazie rozwoju.

Słowa kluczowe: edukacja zdalna, system uniwersytecki, model edukacyjny

Corresponding address – Adres do korespondencji:
Semih Ötles, Department of Food Engineering of Ege University, Bornova 35 100, Izmir, Turkey, e-mail: sotles@food.ege.edu.tr

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