

# An Open Educational Resource Experience in Turkey: Yunus Emre Learning Portal

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## **Abstract:**

*Open course ware movement in the early 2000s began with the MIT OpenCourseWare (OCW) application in the United States and gradually spread to other countries. Implementation began in Turkey with OpenCourseWare Consortium created by bringing together 24 universities and 3 institutions in the leadership of The Turkish Academy of Sciences in 2007. Also number of members increased to 61 today. To create Turkish Open Education Resources (OER) pool OpenCourseWare Consortium implemented two main approaches: 1)Translating of successful foreign OER samples into Turkish language 2)creating new Turkish OER by volunteer subject specialists. Today within OpenCourseWare Consortium there are 80 courses which contain original or translated educational course materials such as book, video, audio, etc. Anadolu University is the major open education provider in Turkey. In 2008 Anadolu University initialized Yunus Emre Learning Portal as an OCW initiative but Yunus Emre was independent from OCW Consortium in Turkey. Today Anadolu University serves 180 courses which consist of multimedia materials classified by 20 different categories in Yunus Emre Learning Portal. Each courses in Yunus Emre Learning Portal is structured with e-books, audio books, video programs, trial exams, flash based interactive and multimedia e-courses. Commonly used Creative Commons License Models for OER has not yet been ported in Turkey. The license used in Yunus Emre Learning Portal is based on Attribution Non-Commercial No Derivatives (CC BY-NC-ND) which is one of the CC International license models. In the first year, users could login with free membership to Yunus Emre Learning Portal and*

*usage information of users were logged. By the end of the first year, 30,000 users registered. In 2009 obligation of free membership was reversed to anonymous access. Between 2010 and 2012, it was determined that 289,580 unique users visited Yunus Emre Learning Portal 1,380,723 times.*

## **MIT OpenCourseWare (OCW)**

MIT OCW is a free publication of MIT course materials that reflects almost all the undergraduate and graduate subjects taught at MIT. MIT OCW is an approach to sharing educational resources. The site (<http://ocw.mit.edu>) presents the core academic content—including lecture notes, syllabi, assignments and exams—from substantially all of MIT's undergraduate and graduate curriculum freely and openly to support formal and informal learning around the world. Many of the site's more than 2,100 courses also include rich media resources such as video lectures, simulations, and animations. OCW has inspired a worldwide movement that now includes hundreds of universities sharing materials from more than ten thousand courses.

In 1999, MIT Faculty considered how to use the Internet in pursuit of MIT's mission—to advance knowledge and educate students—and in 2000 proposed OCW. MIT published the first proof-of-concept site in 2002, containing 50 courses. By November 2007, MIT completed the initial publication of virtually the entire curriculum, over 1,800 courses in 33 academic disciplines. Going forward, the OCW team is updating existing courses and adding new content and services to the site.

There is no registration or enrollment process because OCW is not a credit-bearing or degree-granting initiative. MIT OpenCourseWare is a publication of the course materials that support the dynamic classroom interactions of an MIT education; it is not a degree-granting or credit-bearing initiative. However, you should work through the materials at your own pace, and in whatever manner you desire.

The MIT OpenCourseWare technology solution supports a complex publishing process. This large-scale digital publishing infrastructure consists of planning tools, a content management system (CMS), and the MIT OpenCourseWare content distribution infrastructure.

The planning tools used by the MIT OpenCourseWare team to assist faculty in publishing their course materials include a custom application of FileMaker Pro, and

several checklists and documents. For creating and managing content, they use several desktop tools as well as the open-source CMS, Plone. Their content delivery infrastructure includes a sophisticated publishing engine, content staging server, and a content delivery network utilizing Akamai's EdgeSuite platform.

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### **The Open University (OpenLearn)**

OpenLearn is reflection of OCW initiative in Open University. The LearningSpace contains materials from Open University courses. These are online and free materials from the same courses their registered students take. With over 500 study units, spread across 12 subject areas like education, languages, history&art, science, math & technology.

### **EDx**

EdX is a not-for-profit enterprise of its founding partners, the Massachusetts Institute of Technology (MIT) and Harvard University that offers online learning to on-campus students and to millions of people around the world. To do so, edX is building an open-source online learning platform and hosts an online web portal for online education.

EdX currently offers HarvardX, *MITx* and BerkeleyX classes online for free. These institutions aim to extend their collective reach to build a global community of online students. Along with offering online courses, the three universities undertake research on how students learn and how technology can transform learning – both on-campus and online throughout the world.

Online learners who demonstrate mastery of subjects can earn a certificate of completion. Certificates will be issued by edX under the name of the underlying "X University" from where the course originated, i.e. HarvardX, MITx or BerkeleyX. For the courses in Fall 2012, those certificates will be free. There is a plan to charge a modest fee for certificates in the future.

## **OCW in Turkey**

The major attempt to introduce OER into Turkish higher education system is accomplished by the Turkish Academy of Sciences (TUBA). In the letter sent by the president of TUBA in late 2006 to the rectors of the universities, the educational potential of the OER is pointed out and representatives from the universities are invited to a meeting to further discuss the issue. In early 2007 the Academy assembled two successive meetings with the representatives from the universities as the Turkish Open Courseware General Assembly.

As a major outcome of these meetings, a national OCW Consortium (<http://uadm.kulakbim.gov.tr/>) was formed with members from all Turkish academic institutions, Higher Education Council (YÖK) and Turkish Academic Network and Information Center (ULAKBIM) under the Scientific and Technological Research Council of Turkey (TÜBİTAK). The elected members of the executive committee are working towards the nationwide implementation of the project. Currently, in addition to TUBA and TÜBİTAK, 45 universities have signed MOU's with the consortium to contribute and develop OER in the native tongue (Yazici et al, 2008)

To create Turkish Open Educational Resources (OER) pool OpenCourseWare Consortium implemented two main approaches: 1) translating of successful foreign OER samples into Turkish language 2) creating new Turkish OER by volunteer subject specialists. Today within OpenCourseWare Consortium there are 80 courses which contain original or translated educational course materials such as book, video, audio, etc (TUBA OCW Consortium, 2012).

There are 60 higher education institutions as members in TUBA as of August 2012. The university numbers that has OCW portal is 8 (TUBA OCW Consortium, 2012). The other factor which stimulates publishing OCW is open and distance education applications. Anadolu University, Ministry of Education and other universities that serve distance education programs are among open and distance education institutions in Turkey.

## **Anadolu University Open Education System**

The open education system in Turkey has been started by the Anadolu University as a central application in Higher Education in 1982. Today, students are accepted to 31

associate degree and 11 graduate level programs on the basis of students' grades in the open education system. 1.500.000 students are enrolled in the Anadolu University Open Education system. More than 45% of students in Higher Education Institutions of Turkey are registered in the Anadolu University. Anadolu University is the major open education provider in Turkey.

The initial design of the open higher education system of the Anadolu University includes five components i.e., course books designed according to distance education techniques, instructional programs broadcasted in the national television channel, face-to-face academic facilitation courses given at evenings and week-ends, central examinations organized simultaneously in all cities, and bureau services offered to students. Since 1999 a series of e-learning services has been designed and offered to students in the Internet environment. The first service in the Internet environment was the trial exams composed of randomly chosen questions. This service later was entitled as e-Exam. Then e-Practice materials, interactive multimedia software, including text, picture, animation, and voice, have begun to be offered. The following service was e-Book that was actually electronic copies of the course books published on the Internet. The e-Television service, i.e., publishing the digital video files of the instructional programs that are published on the Internet, has begun as a result of the developments in the Internet infrastructure in the country and increase in the number of students having broadband Internet access. In the following period, e-Consulting service that allowed students ask questions to the subject area specialists and receive reply asynchronously was offered. In the same period, the e-Audio Book service, which means publishing radio-phonically vocalized digital audio files of the course books on the Internet, has begun. For all those services, the e-Support application that allows students to get help from experts about technical problems via the Internet has been put into practice. Those services that were developed by different teams at different times were combined under the name of Open Education e-Learning Portal in 2005. This allowed students to access all services once they log in. In 2006, a multimedia e-Course design that included text, picture, animation, voice, and video has developed and courses have begun to be developed according to this design for large number of students (Mutlu, 2007).

Since 2007 there has been opening e-Certificate Programs in Anadolu University Open Education System. Each program has 3 different courses and each course has e-Course, e-Exercise, e-Exam, e-Television, e-AudioBook and e-Facilitation services in e-Learning portal of the e-Certificate system. Students can study in this portal and with

their hardcopy book during 12 weeks. At the end of 12 weeks they get an online certificate exam where they live in. Students who get min 50 grade for each course deserve to get program certificate. Up to now 20,000 students have been enrolled in and about 9,000 have got certificate from 42 e-certificate programs which are opened 3 times a year.

Anadolu University's one another distance education service is Yunus Emre Learning Portal which is open to whole of society (Yunus Emre, 2012). After examining other institutions publishing online educational material in Turkey we are going to discuss in detail Yunus Emre Learning Portal.

### **Open Primary and High School**

The Open Education High School system was started in 1992 by the Ministry of National Education (MNE) for students who are above the secondary education age. Today, the open high school has more than 680.000 students (OEHS, 2012). The Open Primary School system was started by the Ministry of National Education in 1997 for the ones who could not complete their primary education and adults who are above the compulsory primary education age level so that they can receive education everywhere and in all circumstances through distance education principles and techniques. The Open Primary School has more than 607.000 students (OPS, 2012). The basic instructional materials in the Open Primary School and Open High School that depend on the Ministry of National Education are the course books and television/radio programs. The Vocational Open Education High School that use distance education and face-to face education methods has been started by the MNE in 2006 and today more than 260.000 students are enrolled in Industrial Vocational High Schools, Imam and Preachers' High School, Vocational Girl's High School and Trade Vocational High School (VOEHS, 2012). The MNE Vocational and Technical Open Education School was established in 1974 and offers distance education for certificate. Nearly 70.000 individuals graduated from the Vocational and Technical Open School have been given a document stating that they are authorized to work as electricians (VTOES, 2012), (MNE, 2012).

e-Learning services belonging to all of these schools is offered by EGITEK unit which has been found for this purpose by the ministry. EGITEK prepares the following e-learning materials for students enrolled in Open education institutions within the ministry (EGITEK, 2012).

- PDF files of the courses are accessible on the Internet.
- Television-radio programs are sold in cassette and CD format.
- Television programs are published on the Internet via the Internet-TV service.
- Radio programs are broadcast on the Internet via the Internet-Radio service.

Due to free access to course content which is published by MNE for open primary and high school students can be assessed as an open courseware.

### **Other Universities Providing Open and Distance Education in Turkey**

In Turkey since 2001-2002 academic year there has been opened distance education programs with small number of students besides Anadolu University. In 2012-2013 academic year there will be 116 open and distance associate and 53 open and distance bachelor degree programs in other 36 universities. It is expected these programs to have over 100.000 students (ÖSYM, 2012).

There has been published online content that is open just for their students' access. So the content which is published in these programs are not considered as an open courseware. But students enrolled in these programs are potential consumers for open courseware which are published by other institutions.

When it is evaluated generally, it is estimated that there are over 4 millions of people educated and ongoing educating students at open or distance primary, high school and university level. These people are used to have an ability to have distance and open education. So due to lifelong and informal learning these people are the most expected to consume open courseware.

### **Yunus Emre Learning Portal**

Anadolu University, which is the leading and the biggest institution offering Distance Education in Turkey, possesses the richest pool of course materials which has been developed since 1982. Yunus Emre Learning Portal was developed so that everybody in the society can benefit from those courses that have been developed using distance education techniques and that allow individuals to learn autonomously. The "Yunus Emre" name comes from the name of the Turkey's national poet. Yunus Emre Learning Portal was published on 20 of January 2008 with 20 categories and 149 lessons and on the same day it was introduced to rectors of all universities in Turkey during the

meeting of Interuniversity Board of Turkey.

In Yunus Emre Learning Portal e-book, e-course, e-audio book, e-exam, e-video of more than 100 courses are broadcast. Users can read their course notes via e-book; download and watch videos of their courses via e-television; study in an interactive environment with videos via e-course; download and listen to the audible lectures of the courses; and they can measure their success by e-exam.



*Figure 1. Yunus Emre Learning Portal*

Apart from academicians and university students, everyone who wants to learn on his/her own can benefit from Yunus Emre Learning Portal which is updated every time without paying for any fee. Academicians can use the content of Yunus Emre Learning Portal for their own lectures (if they cite and show in the reference page the ISBN code of the book they have used and the service such as e-exercise, e-lesson, e-book, e-television, e-exam, e-audio book); students can study their lessons in virtual environment by using Yunus Emre Learning Portal; any individual from any age group can contribute to their own self development by following lessons in Yunus Emre Portal. Yunus Emre does not give learners a certificate or a diploma.

In the first of the projects users needed to be registered once in order to take the courses in the Yunus Emre Learning Portal. They could sign in with the username and password



that they would state during the registration process. By the end of the first year, 30,000 users registered to Yunus Emre Learning Portal and The Portal was visited about 4 million times.

By the end of the first year, 30,000 users registered. In 2009 obligation of free membership was reversed to anonymous access. Between 2010 and 2012, it was determined that 301.938 unique users visited Yunus Emre Learning Portal about 3 million times.

The courses in Yunus Emre Learning Portal are broadcast under the Creative Commons License. According to the Creative Commons License, users have the right to display the contents of the courses. Users have to refer to Anadolu University for all the materials they have used. Users can not use the course contents for commercial purposes.

## **Design & Development**

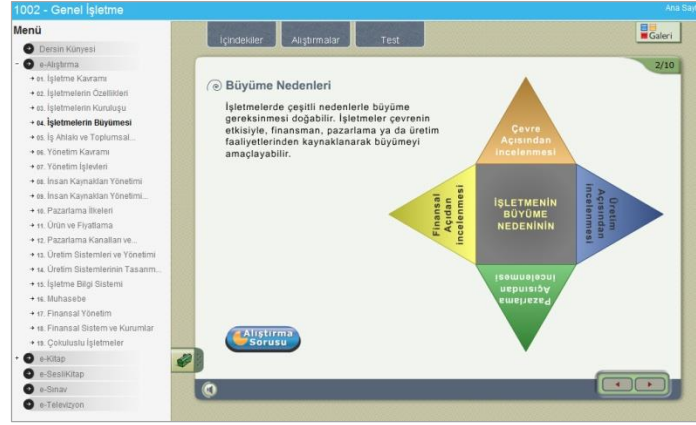
Yunus Emre Learning Portal is a learning management system that is developed to satisfy lifelong learning needs of communities. The entire portal intended for OCW initiative was designed and developed by Computer Aided Education Unit of Open Education Faculty. Yunus Emre Learning Portal has a user-friendly interface. All widgets constructed in the web interface enable users to easily navigate categories and courses that they are interested in.

## **Learning Environments**

Anadolu University e-learning content which is composed of e-Exercise, e-Course, e-Book, e-Television, e-Exam and e-AudioBook is offered to all students via Yunus Emre Learning Portal. Now let's review these components in detail.

**e-Exercise:** When you register in the Yunus Emre Portal, you will be able to study with the help of audible and interactive multimedia software and you can reinforce the things you have learned by studying a large number of questions with their answers. E-exercise service aims to create the most effective and efficient online study atmosphere for learners. E-exercise service, which is also defined as an interactive multimedia education software containing audible, dynamic animations and intensive student-computer interaction, has been designed with the latest technology and developed conforming to industrial standards. Exercise software is offered in two different ways as

question-based and lesson-based depending on the characteristics of the course. Question-based exercise software consists of Question, Answer, Example, Lesson and Test parts; lesson-based exercise software consists of Lesson, Exercise and test parts.



*Figure 2. e-Exercise Learning Environments*

**e-Course:** e-Course software offers the instructional contents in videos. Lessons are supported with interactive animations. They allow learners to interact with the lesson in a variety of cases, answered questions and materials that are developed according to the needs of the course. Questions which are included in the e-course service keeps attention of learners' to the lesson alive and allow them to generate ideas when needed. In addition, learners' will be able to evaluate themselves by completing the tests at the end of every unit.



*Figure 3. E-Course Learning Environment*

**e-Book:** Course books are prepared in Adobe Flash Paper format so that learners can access and use the books easily. e-Books, which can be read on computer, have more advantages than printed books. Access to the demanded book is possible in a minute

because it is broadcast on the internet, and making word scanning easy are some of these advantages. e-Books, which are offered in the Adobe Flash Paper format, can be read on every kind of PCs and notebooks.

**e-Television:** e-Television contains the TV shows of the lessons which broadcasted on TV. You can have more flexible studying hours by downloading the lesson videos to your computer. After you download videos to your computer once, you can watch the video of the lesson whenever you want without time pressure.

**e-AudioBook:** e-AudioBook service is offered for visually disabled and for the ones who prefer studying by listening to their books. With the help of this service, you have the opportunity of listening books by downloading in MP3 format on the Internet. In e-audiobook service, professional doubling artists dub the books in a radiophonic way and books are enriched with sound effects.

## **Conclusion**

In Turkey Yunus Emre Learning Portal is one of the biggest learning portals in terms of course amount and media variety of open courseware. People who have open and distance education experience at primary, secondary or higher education level can resolve learning needs effectively with Yunus Emre Learning Portal. With the aim of increasing peoples' awareness about open courseware, it should be implemented new projects that focus on consultation about lifelong and informal learning. And also with this consultation services, new studies that lead people to instruct their own personal learning environments and use open courseware can be put into practice.

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