

Open Education Resources of Anadolu University, Turkey

Cengiz Hakan AYDIN
Anadolu University
chaydin@anadolu.edu.tr

Nazmi ULUTAK
Anadolu University
mulutak@anadolu.edu.tr

Abstract

This paper intends to express the importance of open education resources and to introduce the open education resources of Anadolu University, Turkey. The open education resource movement is especially important in emerging countries where higher education is still considered as a privilege due to shortage of available seats for everyone who would like to get in a university, where knowledge is still been considered as assets of professors, and where there are a few opportunities for people to improve themselves either in their profession or in general. Anadolu University as a dual mode university provides not only open education diploma programs but also open education resources to the Turkish citizens for almost thirty years. Second University, e-certificate, Yunus Emre, ANAPOD, Open Courseware are the major open education resources the University offers. The informal qualitative and quantitative evaluations have shown that a great number of people are benefiting from these resources.

1. Introduction

Although the terms informal, non-formal and formal learning have been around for sometime, they had never grasped an attention that they deserve until the recent developments experienced in the field of lifelong learning. As well stated in the OECD [1] and EU [2] reports, learning is an everyday activity and we all learn more outside the formal learning environments than in schools and training settings. That was why especially EU emphasized strongly on recognition of non-formal and informal learning as well as formal learning.

However, it seems there is not a consensus on non-formal and informal learning. Some experts argue using the term informal and they categorize learning into two groups: formal and non-formal learning [3] [4] while others, such as Beckett and Hager [5], and Stern and Sommerlad [6], focused on informal learning as a workplace learning strategy. After having reviewed the above and more studies on definitions of formal, non-formal and informal learning, Colley, Hodgkinson and Malcolm [7] concluded that there is a "... serious doubts about the possibility of establishing an objective way of defining formal,

non-formal and informal learning, that would be relevant in most if not all situations, from most, if not all, value positions, and for most, if not all, purposes" (p. 17). Still we, as the authors of this paper, felt that EU definitions of these terms fit the context of open education resources. According to EU [8]:

***Formal learning** is typically provided by education or training institutions, with structured learning objectives, learning time and learning support. It is intentional on the part of the learner and leads to certification;*

***Non-formal learning** is not provided by an education or training institution and typically does not lead to certification. However, it is intentional on the part of the learner and has structured objectives, times and support;*

***Informal learning** results from daily activities related to work, family life or leisure. It is not structured and usually does not lead to certification. In most cases, it is unintentional on the part of the learner.*

As mentioned above, recognition of non-formal and informal learning is one of the key areas that EU wants to improve the European higher education. In 1999, EU has started a process, entitled as Bologna Process to create European Higher Education Area (EHEA) that intended to facilitate the mobility of EU citizens for learning purposes among European higher education institutions. The main goal of the Bologna Process was to make Europe more attractive for education and work. In 2001, promotion of lifelong learning was accepted as one of the core action lines of this process. The EU Commission sees lifelong learning (non-formal and informal learning) as an important mean for Europe to compete in the information society and to cope with the challenges occurred as a result of technological developments. Thus, recognition of prior learning including non-formal and informal learning was considered as a criterion to follow-up the Bologna Process in each EU country. One of the recent follow-up reports by Stocktaking Working Group [9] revealed that recognition of non-formal and informal learning is still at expected level and improvements are quite slow compare to other action lines.

Measures for the recognition of prior learning (RPL), including non-formal and informal learning, are at different stages of development across the EHEA. In a few countries an enabling legislative framework has been in place for a number of years and the application of RPL is widespread. In others, developments are either still at an early stage or have not yet started. The answers from many countries suggest there is little or no recognition of learning undertaken outside the formal education system (Rauhvargers, Deane & Pauwels, [9]).

The Working Group also stated that in many countries recognition of RPL, including non-formal and informal learning was misinterpreted or kept limited with the skills gained in workplaces. However, developments in information and communication technologies, especially evolution of the Internet, have provided tremendous opportunities for those who look for ways to learn and expand their skills, namely for non-formal and informal learners.

Brown and Adler [10] noted that the most visible impact of the Internet on education to date has been the Open Educational Resources (OER) movement. OER is a movement among educators and professionals to provide free access to course and other educational materials for anyone who would like to use them. Smith and Casserly (2006) reported

that MIT's OpenCourseWare (OCW) initiative, funded by the William and Flora Hewlett and the Andrew W. Mellon foundations was the first milestone of this movement and inspired many higher education institutions and more to contribute the movement by opening their own learning materials to public. The OER movement has especially helped recognition of informal learning by making it more visible as being a part of all learning (OECD, 2007). Recent figures supported this idea. For instance, according to d'Oliveria [11] MIT's OCW site receives 1-1.5 millions visits every month by over 800,000 unique visitors from almost every country on earth. Among these visitors 45% also revisits the site.

On the other hand, some argue the definition of openness. Lane [12], for example, equates openness and freedom but at the same time emphasizes the variation of the degrees of freedom available within a particular openness and gives the spectrum of Creative Commons licenses as an example for this variation. Schaffert and Geser [13] shared the same idea and have set out four dimensions of openness for OER:

Open access – content (including metadata) is provided free of charge

Open licensed – liberally licensed for re-use, favorable free from restrictions to modify, combine and repurpose

Open format – produced in open format and designed for easy re-use

Open software – produced with open source software

MIT's OCW for instance can be classified as open licensed OER according to this classification because users are allowed to re-use, modify, combine and repurpose the resources (in text, video, audio formats).

Although challenges remain, such as language and access, OER are considered a way to cope with learning demand in underdeveloped and emerging countries. For instance, Singh [14] stated that more people in developing countries are using OER than developed countries and in these countries the OER movement can act as stimuli to raise quality and standards. Similarly, Atkins, Seely-Brown, & Hammond [15] use the access figures as evidence for the impact of OER in developing countries as a mean to offer quality and equal education opportunity to all who needs. Also, Kumar [16] considers OER, such as quality tools, content and practice, as a great promise for meeting the challenge of providing access to quality higher education in India. All these resources as well as others show us that various groups in developing countries get different benefits from OER. Students for example use OER as a supplement to their courses; individuals can use them to access the information they needed; and teachers or university professors use them to offer better learning opportunities to the students in their courses. Although there is not any research study, above are the ways of using OER in Turkey.

2. Anadolu University

It might be beneficial to start with a few words about Turkey before introducing Anadolu University and its distance education programs. Turkey is a country linking the continents of Europe and Asia, and has the majority of the land in Southwest Asia. The country has a total area of 780.58 square km., divided into 80 administrative provinces with a total population of 63 million. About half of Turkey's population lives in rural communities and engages in agricultural occupations, while the other half lives in or near urban areas and is involved in heavy industry, manufacturing, or urban services. The gulf between

rich and poor is noticeable, especially as you travel east. Ninety-nine percent of Turks are Muslims (most of the Sunni tradition). Islam plays a large part in the daily life of any Turk and is particularly evident to the visitor (WorldNet, 2003).

As an emerging country with a relatively young population, education has the utmost priority for Turkey. The schooling rates are 99.7 percent for primary school, 69.3 percent for middle school, 53.4 percent for high school and 22.4 percent for higher education including open education. About 48 percent of the country's higher education population is in the Anadolu University distance education system. The Ministry of National Education is responsible for all educational services in the country, excluding higher education. The Council of Higher Education is the planning, coordinating and policy making body for higher education. Formal education includes pre-school education, basic education, secondary education, and higher education. Basic education, which is extended from 5 to 8-years in 1997, forms the foundation of national education system. Education is compulsory for every Turkish citizen from the age of six to the age of fourteen, regardless of sex, and is free-of-charge in state schools. The secondary education system can be broadly classified as General High Schools and Vocational and Technical High Schools. Higher education is defined as all post-secondary programs with duration of at least two years. The system consists of universities and non-university institutions of higher education (police and military academies and colleges). Each university consists of faculties (four-year colleges or schools) offering bachelor's level programs, and two-year vocational schools offering associate level programs of a strictly vocational nature.

Admission to higher education in Turkey's centralized system is based on nation-wide, yearly examinations administered by the Student Selection and Placement Centre (OSYM), a government agency. Candidates with scores of at least 145 points are eligible for entering a distance-learning program. Those with scores of at least 160 are qualified to make selections of their preferences of universities and programs. The candidates are placed in higher education institutions according to their score and the allotment of the institution. There is severe competition for university entrance, causing a bottleneck in the initial process of acceptance to higher education institutions. For example, in 2004, 1.902.250 students (high school graduates) applied to take the university entrance exam but only 543.035 (28 percent) were placed in the higher education institutions. Among the placed students, 274.474 (approximately 50 percent) entered Anadolu University's distance programs. Briefly, Anadolu University has been filling quite a large portion of the higher education demand in Turkey since early 1980s.

Anadolu University is actually not an open university. It has a dual mode education system. The on-campus education is offered through its 9 colleges (or faculties, "faculty" is a term used in Turkey instead of "college" or "school"), 10 vocational schools, 18 research centers and the state conservatory (school of music and theatrical acting). The distance education programs are organized under three faculties: Open Education, Business Administration, and Economics.

The University was established in 1981 from an older institution, the Academy of Eskisehir, Economics and Commercial Sciences (EAECS). In accordance with the Higher Education Act of 1981, it was also authorized to provide distance education in Turkey on a national scale. As a result in 1982 the former Faculty of Communication Sciences of the EAECS was transformed to become the Faculty of Open Education, or, as it is called

commonly, the Open Education Faculty (OEF). This faculty was an outgrowth of the newly established Anadolu University because at that time, it was the only institution that had experience in the technical and theoretical aspects of distance education. The first educational television pilot project of Turkey was undertaken here during the 1970's under the auspices of the Educational Television department of the EAECs (McIsaac, Murphy & Demiray, 1988). In the 1982-1983 Academic Year, the OEF started to offer two, four year undergraduate distance education degree programs in Business Administration and Economics. That year 29,478 students enrolled in the programs. By 2004-2005, the number of enrolled distance students at Anadolu University reached approximately 1 million. Today, the OEF, along with other two distance education faculties, is offering 12 different BA and 50 associate degree programs to students in Turkey, the Northern Cyprus Turkish Republic, Azerbaijan and the European countries such as Germany, Netherlands, England and France. The programs vary from Business Administration to Pre-school Teacher Education.

The distance programs of Anadolu University are primarily print-based, correspondence type and require self-study. In other words, students are expected to study their textbooks at their own pace, alone, and to take scheduled centralized exams administered at remote locations. Correspondence study is also supported with several services including broadcast television programs aired by a state channel throughout the country, video and radio programs distributed on cassettes, CDs or DVDs, remote evening classes, and computer-supported learning environments. The rationale behind this sort of an instructional approach is common to all open and distance learning initiatives in emerging countries. These are based on (1) outreach to as many learners as possible in cost effective ways, and (2) providing alternatives for learners' limited access to the other technologies including VCRs, computers and even television broadcasts. Figure 1 reveals that distance learning is a necessity for Turkey rather than a convenience owing to the shortage of higher education institutions and the increasing demand for education. Since printing and mailing do not cost as much as advanced technologies, Anadolu University is able to accept thousands of learners every year into its programs. In addition, recent figures show that the majority of distance students cannot access computers and related technologies, despite the improvements in technology distribution. For instance quite a number (30 percent) of the current distance learners of the University live in rural areas where they have difficulties accessing computers and the Internet. That is mainly why the majority of Anadolu University's distance programs are still correspondence-based. The number of learners in online (only 2 percent of all learners) and hybrid (10 percent) programs is quite limited despite the improvements. Due to the number of students, success in the majority of the programs is still determined by multiple choice achievement tests. Each academic year, a mid-term, a final and a make-up exam are centrally administered to the students to evaluate their performance in the courses through out the country and other countries. The University usually uses around 65.000 classrooms in 5,000 buildings and hires more than 100.000 personnel (local teachers, school staff and administrators, transporters, etc.) to administer the exams. The University also provides administrative support to its distance learners through its 84 offices in 77 provinces of the country. Those offices are run by the University's own staff (total 335 staff) and almost all the properties of the offices are owned by the University. In addition, learners may reach the University via email and phones to receive help for

their administrative and technical problems. In terms of social support, the University encourages the learners to attend graduation ceremonies and local events organized by the administrative offices. Moreover the University has an online weekly newspaper that gives news and recent developments in the University.

Anadolu University is also the major lifelong learning provider in Turkey. The country reports on Bologna Process reveal the role and importance of Anadolu University in providing lifelong learning opportunities. One of the major areas of the report is about lifelong learning opportunities provided in the country and unfortunately (fortunate for Anadolu) the reports include mainly services Anadolu University provides as sustainable informal learning opportunities like OER.

3. Open Education Resources in Anadolu University

Although distance programs of Anadolu University provide learning opportunities to many who cannot get in any formal higher education institutions with minimum entrance requirements, we do not consider these programs as OER. The OER projects Anadolu University offers are entitled as, Second University, e-Certificate Programs, OpenCourseWare (OCW), Yunus Emre, and ANAPOD.

3.1. Second University

The University has been carrying out a project, entitled as Second University, in order to offer open access to a second higher education opportunity. The project, initiated in 2003-2004 academic year, enables the Associate and the Bachelor's degree holders, as well as students in any program of any higher education institution in Turkey to be admitted to the distance programs of Anadolu University without taking the university entrance exam. The Bachelor's degree holders can apply to two or four-year distance programs, while the Associate degree holders can be admitted only to the two-year programs. The total number of students in the programs is around 70,000 and the number of graduates up to now has reached to 10.000 in 2009.

3.2. e-Certificate Programs

e-Certificate programs are designed for those who would like to improve their job-related skills and hold at least a high school diploma. Currently, the University offers 17 different e-certificate programs in the fields of Accounting, Marketing, Entrepreneurship and Finance. Each program is composed of 3 courses and the achievement is tested by face-to-face centralized exams organized in 17 provinces in Turkey and Cologne in Germany. Although all the materials including textbooks and TV Programs are provided, the programs are heavily based on e-learning tools and services. Some of the organizations (e.g. KOSGEB - Small and Medium Sized Industry Development Organization) and corporations (e.g. Migros, a supermarket chain) encourage and provide financial support to the members or employees to attend these programs.

3.3. Yunus Emre

Yunus Emre: New Generation Learning Portal (<http://yunusemre.anadolu.edu.tr/>) is an OER initiative to disseminate the instructional materials used in the University's distance courses. It launched in 2008 by Open Education Faculty and was named after a historical poet and philosopher, Yunus Emre. The goal has two folds; (a) providing informal learning opportunity to those who needs without any cost, and (b) introducing the University's ODL services and content to the public. All the course materials including video (downloadable video programs originally produced to air), multimedia software (non-downloadable e-learning materials), audio books (downloadable, mp3 format), digitized version of textbooks (non-downloadable text in .pdf format), and trial exams (non-downloadable, randomly generated, timed multiple choice tests). In Yunus Emre portal currently there are materials related to total 153 courses in 20 subject areas. Since January 2008 total 6.792.031 different individuals, 49.054.080 times entered the portal.

No formal feedback system was established. So we are not sure about the impact of the project. But we observed an increase in the number of participants to our e-certificate programs after launching the Yunus Emre portal. We inferred that the project served well to achieve its second goal: introducing our distance programs.

On the other hand, there are several issues concerning Yunus Emre project. First of all, it is mainly an open access OER project. We feel that we should work on transforming these materials to open licensed so that more people can download and modify them to use according to their own purposes. We also found out that we did not do a good job marketing this program –many people still do not aware of this learning opportunity. We should work on our marketing strategies too.

3.4. OpenCourseWare (OCW)

After establishment of OCW national consortium in 2007, Anadolu University initiated a project to support the consortium goals. It was coordinated by the Center for Research and Development in Distance Education (UZ-ARGE). EduCommons infrastructure was used to offer available course materials of the professors in the University (<http://adm.anadolu.edu.tr:8080/eduCommons>). A support team (2 technical & 1 OER experts) provided structured and one-to-one training to all faculty who voluntarily contribute the project. These experts also offered ongoing technical and instructional support via online tools, by phone and in face-to-face meetings. Due to lack of motivation, shortage of technology and instructional design (knowhow on OCW) skills as well as copyright concerns among faculty members were the main barriers for diffusion of OCW project.

3.5. ANAPOD

The Computing Center of Anadolu University launched ANAPOD project, another open access opportunity, in 2008. It is actually a podcasting system and inspired by Apple's iTunes-U. Unfortunately, Anadolu University could not join the iTunes-U because of lack of adequate copyright laws but worked with Apple's legal distributor in Turkey to create and offer podcasts of the courses to the public. The goal has four folds; (a) supporting face-to-face instruction, (b) sharing faculty experiences with general public, (c) empowering faculty to prepare open learning materials that might help the University

widen its open and distance learning services (alternative production method), and (d) testing the integration of some new technologies into instructional (ODL) processes such as mobile learning. Completely a new infrastructure (hardware and software) established to the faculty chosen according to their willingness and performance in previous projects from all the departments. Several high-tech hardware (a MacBook, HD Video camera with 60 GB hard disk capacity, advance microphone system for recording during F2F lectures, 250 GB portable hard disk, etc.) and software (iWork, iLife, screen capture and video editing, etc.) were also given to each participant faculty. These faculty members are asked to publish their materials in a Wiki site (<http://anapod.anadolu.edu.tr/>) created specifically for ANAPOD after taking a series of structured training on MacBook Basics (3 hours), Digital Content Generation and Podcast Materials Production (2+4 hours), Video Encoding, Editing and Web Content Development (7 hours). One-to-one training and ongoing support are also being provided by the Computing Center.

Currently, there are complete course materials (text, video, audio) belong to 54 courses created by 36 faculty members. Also production of materials for 93 courses is still in progress. Although we have not done any formal study on this project we observed that in these courses, the students performed better in the exams while their attendance to the class sessions decreased. We also noticed that everyday more and more people from other institutions and the countries are accessing these materials. Moreover we found out in time the quality of the materials and know-how among faculty about use of technology and technology-based learning increased. On the other hand, we think that some materials need improvement to be used as OER. Also, we need to change these materials from being open access to open licensed materials to help more people get benefit out of them. Furthermore, copyright and intellectual property issues, heavy workload, lack of time management, instructional design and technology skills among faculty members as well as negative attitudes against use of technology in instructional processes are major barriers for the success of ANAPOD project.

4. Other Open Education Resources Initiatives in Turkey

OER movement is still in its infancy stage in Turkey. There is only one serious attempt - except the ones in Anadolu University-, the Turkish OpenCourseWare Consortium (UADMK). It is a national consortium under the auspice of Turkish Academy of Sciences (TUBA), of 45 Turkish academic institutions, Higher Education Council (YÖK) and Turkish Academic Network and Information Center (ULAKBIM). UADMK was inspired from MIT's OpenCourseWare (OCW) Project and launched in March 2007. The goal of this consortium is to promote OCW among Turkish Universities by encouraging, offering training and support, and providing funding opportunities. The consortium just recently got a grand from government funding agency to offer financial support to those faculty who would like to contribute the OCW movement.

5. Lessons Learned

Above experiences regarding OER reveal that there are serious barriers for widening the OER movement in Turkey. One of the main barriers is the lack of adequate copyright and intellectual property laws. Especially faculty members hesitate to open up their courses

and course materials due to this lack. Another barrier is about shortage of incentives. Anadolu University's OCW project did not last long because there was no incentive for faculty to join the project. However another project, ANAPOD has been successful due to fact that the majority of the professors want to contribute to be able to get MacBook and other equipments. We are hoping that UADMK's grand will fire up the movement a bit more. Another barrier is the shortage of technical and instructional skills of the professors. Our observations shows that training do not meet this shortage. Ongoing support is crucial.

On the light of above experiences we think that OER is one of the significant movements to meet the learning needs in countries like Turkey where there is not enough formal education opportunities for all. So, the policy makers should take all the required legal actions to promote creation of OER. The higher education providers also work on creating incentives, training and support opportunities for their faculty members to contribute the movement.

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