

## Current MOOC Platforms at Online Education

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### Abstract

The rapid developments in information and communication technology, for educational activities, has led to the emergence of new opportunities as in many fields. One of the most important of these developments is Massive Open Online Courses (MOOCs). The reason for this development is the rapid spread of e-learning courses and started to use. But MOOC project, although the popular press and media organizations in a short time of academic publications on this subject said that equally accelerated. This is because can be interpreted as this project, that's not enough on the agenda in the academic platforms. To help fill the gap in this topic, comparisons and analysis will be carried out for recognition about current MOOC platforms and a situation assessment will be made about the project in this study. Online education is undoubtedly covered by the existing multiple platforms. These are certainly useful in education. However, users should be aware that through a multitude of platforms in the nature of the benefits to their business. The main objective of this study is MOOC platforms to introduce more closely the academic community to contribute to the resolution of identifying problems. For this purpose, introducing the existing platform and made an analysis for the comparison and place was given to a condition assessment of the project.

**Keywords:** MOOC, MOOC Platforms, e-Learning, Open Online Courses.

### 1. Introduction

Developments occurring in the field of e-learning has led to the some new concepts and projects recently. One of these developments, announced the Massive Open Online Courses (MOOCs) Project in 2008 (Spector, 2014; Hollands & Tirthali 2014). The aim of this project, anyone with an internet connection is to enable participating the courses offered anywhere in the world easily and free. Provided by the project "Free Accessible Educaion" idea. In this context, like Udacity (<https://www.udacity.com/>), Coursera (<https://www.coursera.org/>) and edX (<https://www.edx.org/>) MOOC platforms activations, sign on the courses found interest by many media organizations. The New York Times, Time, MIT Technology Review, Wall Street Journal, Guardian and The Economist magazines like, MOOC have published articles focused (Leontyev & Baranov, 2013).

The concept of open course was announced by Massachusetts Institute of Technology (MIT), with OpenCourseWare in 2002. With this project, about 2150 courses at MIT was presented to public access, free on the web (Ebbena & Murphy, 2014). The report, published in 2011 by MIT, some important statistical information about the project listed as follows: (1) 127 million users visit, (2) 1080 the course has been translated into several languages, (3) 14 million courses compressed file and 28 million audio or video file downloaded, (4) 56 % of users are outside America; 18% East Asia, 12% Western Europe, 9% South Asia and the remaining 18% other countries (MIT OpenCourseWare, 2011). Situation in Turkey this

project, Turkish Academy of Science brought together Council of Higher Education (CoHE), State Planning Organization, The Scientific and Technological Research Council of Turkey – Turkish Academic Network and Information Center and 24 university representatives to ensure the implementation of this project on 23 March 2007. At this meeting, consortium and consortium board has established for the execution of the project. Also lessons access is opened on the organization's web page by participating universities (Türkiye Bilimler Akademisi, 2014). According to the latest status, Ankara, Atılım, Baskent, Eastern Mediterranean, Gazi, Hacettepe, Middle East Technical and Sabancı Universities are to support the project. Open Yale Courses, a similar project publishes lessons on video, was announced in 2007 by Yale University. Due to the participation of other companies, platform was required to accommodate these courses. iTunes U service which founded by Apple company has been processed to answer the purpose. This service can be hosted numerous courses. Teachers prepare their own courses using multimedia elements such as image, text, video. Registered students can attend these classes.

Open lecture courses that are within the scope of service provide students with adequate teaching materials. Despite this, lack of student-teacher interaction is an important weakness. New pedagogical approaches and learning theories are needed to overcome this problem. For the solution of the problem, George Siemens and Stephen Downes, researchers at Manitoba University, released their first MOOC course titled "Connectivism and Connective Knowledge" in 2008. About 2000 students participated in many parts of the world in this course. Students were able to establish a dialogue or discussion forums, online conferencing techniques with both teachers and participants (Siemens and Downes, 2008). This study was also an important example of Connectivism theory. This theory as a basis learning approaches are based on a network connection. In other words, learning establishes and use of indicator links. The rapid development of electronic connections (blogs, forum pages, social networking sites) and against the flow of information in these environments behaviorism, cognitivism and constructivism. On the inadequacy of the conventional learning approaches connectionism theory began to take place in the literature (Siemens, 2005; Downes, 2012).

MOOC project has been much discussion in the press and the media and took its place as a popular topic on the agenda in the short time. However, academic research related to this project, which is expected to bring a new breath to education is not enough. MOOC Research Hub web site which is funded by the Bill and Melinda Gates Foundation (<http://www.moocresearch.com>) was founded with a goal of the solution of the problems in this topic. As this is explained in the target site's home page (Spector, 2014):

"Dramatic increase in online education, especially Massive Open Online Courses (MOOCs), In this way, researchers in learning and teaching effectiveness, managers, students and politicians were left facing a number of problems. Up to the present, MOOCs influence has spread largely through press releases and university reports. Despite this, there has been little research on the MOOC. The proliferation of higher education study MOOC compatible and requires an urgent research agenda."

Online education is undoubtedly covered by the existing multiple platforms. These are certainly useful in education. However, users should be aware that through a multitude of platforms in the nature of the benefits to their business. The main objective of this study is MOOC platforms to introduce more closely the academic community to contribute to the resolution of identifying problems. For this purpose, introducing the existing platform and made an analysis for the comparison and place was given to a condition assessment of the project.

## 2. Method

This study is document review and analysis model of qualitative research methods. The purpose of this model, analysis of written sources containing information about the investigation on target cases. Especially, this method used in the absence of direct interaction to ensure the collection of data (Yıldırım & Simsek, 2006; McMillan & Schumacher, 1997).

Databases were used as Google Scholar (<http://scholar.google.com/>), Web of Science (<http://apps.webofknowledge.com/>) and EditLib (<http://www.editlib.org/>) for the collection of data related to MOOC platforms. In addition to the databases, blog pages and media sites review of the literature was conducted. As a result of research 55 MOOCs platform has been reached and the number of courses is given in this study at more than 11 platforms.

Some basic information is given in Table 1 of these platforms. The number of courses from the platform maximum of 10 platforms was analyzed by comparing under this topic; content, topic, interaction, environment and student collaboration, teaching staff, universities and colleges, fee, certificate, the company. These platforms have been introduced below.

Coursera (<https://www.coursera.org/about/>) works to offer online courses in an educational platform which is the partnership with top universities and educational institutions in the world, open access and free. A world-class educational opportunities accessible to everyone that we foresee a future. We aim to people making strong their lives, their families and the communities they live in developing with the training facility. The number of available courses in July 2014 was 684.

Saylor (<http://www.saylor.org/>) mission is, “ Our goal is education open to all, free and make available. We believe that everyone can have the opportunity to receive training and the cost of training materials will be free with the use of efficient technologies.” Open online educational resources and began to research to improve the catalog consisting of free 300 online courses in 2008. The number of available courses in July 2014 was 324.

EdX (<https://www.edx.org/>) was founded by Harvard and Massachusetts Institute of Technology with support for 60 million dollars. EdX is a nonprofit MOOCs platform. The Edx goal is to become the leading resource provider in the world for learners in general. The target for this purpose; free, spread the open source environment by providing educational opportunities for everyone and provide a better learning and teaching environments by advanced research. The number of available courses in July 2014 was 217.

Canvas Network (<https://www.canvas.net/>), develops open educational resources and aims to remove barriers to learning and education technology company that has been developed by Instructure (<http://www.instructure.com/about-us/>). Canvas Network offers services to learners open online courses that prepare educators in many parts of the world with the help of Canvas Learning Management System. The number of available courses in July 2014 was 48.

World Mentoring Academy (<http://worldmentoringacademy.com/>) publishes a free and open courses provided by universities such as MIT, Harvard, UC Berkeley, Stanford, University of Michigan and Yale. World Mentoring Academy function manages the help of Moodle and Blackbord learning management system like. This platform provides; free student account, content-rich lessons, homeworks, free books and exams and also offering standard facilities provide platforms such as SAT and GMAT exams. The number of available courses in July 2014 was 89.

FutureLearn (<http://www.futurelearn.com/>) a private company wholly owned by The Open University, with the benefit of over 40 years of their experience in distance learning and online education. “Our targets, all learners in the world make meet with the best teachers and each other’s. Also, we believe that education must require a pleasant social experience what does present many opportunities for new discoveries and new ideas.” Among partners, firstly in international and more than 20 universities, where do in England on the side some institute as British Council, British Library and British Museum as well support with a huge archive contains cultural and education materials. Since July 2014 on its website, listed in 3 categories as new, continued and ending and has published 77 lectures in many different branches.

Open2Study (<https://www.open2study.com/>) The Open2Study Platform what has begun with the “Free Online Education for Everybody” slogan, has been supported by Open Universities Australia and has been educating with four-week introduction lectures. Some other opportunities are listed as follows provided:

- (1) To take lessons by lecturers of prominent universities,
- (2) To take many lesson opportunities on various topics,
- (3) High quality videos, animations, mini exams and discussion forums what do make lessons cheerful.

Since July 2014 on its website, contains 49 lessons which can be selected lists from various topics and categorized according to topics of lessons.

Udacity (<https://www.udacity.com/>) The “Artificial Intelligence” lesson that is free and open access came up by Sebastian Thrun and Peter Norvig within an experimental work on continued at the Stanford University. In this lesson more than 160000 students joined from 190 countries and after a while Udacity ensued. Udacity platform is growing up with the mission of changing the future of education pointed out its target as: “Our target, accessible, economical, attractive and very impressive brings up a Higher Education to the world. We believe that education is fundamental human rights and we support students to increase their education and career.” Since July 2014, firstly computer science, maths and programming impending 43 lectures can be enrolled.

Iversity (<https://iversity.org/>), the platform presents Free Mass Online Lessons (FMOL) is a platform laid the foundations by Jonas Liepman while he was a student. And then in 2011 they went on with Hannes Klopper. The platform's target and philosophy were explained so: "FMOL presents incredible opportunity for either students or professors. We believe that activated lessons make a difference by providing all students around the world get lesson from professors. Access to education either makes life of people better or can bring out a change to the whole society. The reason of free lessons is that." The lesson catalogue of Iversity platform, increasing continuous with topics of medicine, computer science, economics, physics, law, design and philosophy, since July 2014 total lesson number increase to 32.

NovoEd (<https://novoed.com/>), our student-centered online learning environment enables you to tear down the walls of your classroom and extend learning through a team-based, collaborative, and project-based approach at scale. In our online courses from top universities, you can learn and work with other students all around the world on course projects and assignments. Since July 2014, firstly education, finance, economy, design and creativity, Science and Mathematics impending 28 lectures can be enrolled.

CourseSites (<https://www.coursesites.com/>) It is established by Blackboard in February 2011. The platform has been supported by Blackboard Company, its target to develop and to publish available and free education opportunities and FMOL courses. The platform characteristics included that provides lessons intended for secondary and tertiary access and also to provide ambient for developing and publishing their own FMOL to lecturers. Since July 2014 on the platform page can be enrolled 72 lessons on various topics.

Table 1. Comparing Table of MOOC Platforms

	1	2	3	4	5	6	7	8	9
Coursera	1.1.,1.2. 1.3.,1.4	2.1.	3.1.,3.2, 3.3.	4.1.	5.1., 5.2.	6.1.	7.1., 7.2.	8.1.	9.1.
Saylor	1.1.,1.2.	2.1.	3.1.,3.2., 3.3.	4.1.,4.3.	5.1., 5.2.	6.1., 6.2.	7.2.	8.1.	9.1.
EdX	1.1.,1.2. , 1.3.	2.1.	3.1.,3.3	4.1.,4.2., 4.3.	5.1., 5.2.	6.1., 6.2.	7.1., 7.2.	8.1.	9.1.
World Mentoring Academy	1.2.,1.3.	2.1.	3.1.,3.2.	4.1.,4.3.	5.1., 5.2.	6.1.	7.1.	8.3.	9.1.
Future Learn	1.1.,1.2. , 1.3.	2.1.	3.1.,3.2., 3.3.	4.1.	5.1., 5.2.	6.1., 6.2.	7.1.	8.1., 8.2.	9.1.
Open2Study	1.1.,1.2. , 1.3.	2.1.	3.1.,3.2.	4.1.,4.3.	5.1., 5.2.	6.1.	7.1.	8.1.	9.1.
Udacity	1.1.,1.2.	2.1.	3.1.,3.2., 3.3.	4.1.,4.3.	5.1., 5.2.	6.2.	7.2.	8.1.	9.1.
Iversity	1.1.,1.2.	2.1.	3.1.,3.3.	4.1.,4.3.	5.1., 5.2.	6.1.	7.2.	8.1.	9.1.
NovoEd	1.1.,1.2. , 1.3.	2.1.	3.2.,3.3.	4.1.,4.2., 4.3.	5.1., 5.2.	6.1.	7.1., 7.2.	8.1., 8.3.	9.1.
CourseSites	1.1.,1.2.	2.1.	3.1.,3.2., 3.3.	4.1.,4.2., 4.3.	5.1., 5.2.	6.1., 6.2.	7.1.	8.1.	9.1.

## 1. Index

1.1 interactive videos, 1.2. Video Conference (Customary), 1.3. Text Reading (Conference or book reading), 1.4. Different multimedia media (.ppt presentation, picture gallery...)

## 2. Topic

2.1. Various Topics (including many topics of the platform)

### **3. Interactive**

3.1. *Mini exam*, 3.2. *Homework*, 3.3. *Course Project*

### **4. Environment and Student Collaboration**

4.1. *Discussion Forums*, 4.2. *Group Projects*, 4.3. *Communication with educator from screen*

### **5. Trainer Team**

5.1. *Reputed professors from distinguished universities*, 5.2. *Well-known persons on their branch*

### **6. University and Colleges**

6.1. *Partnerships with colleges and universities*, 6.2. *College Guarantee (some courses have it)*

### **7. Fee**

7.1. *Most of them are free*, 7.2. *The certificate is waged*

### **8. Certificate**

8.1. *Completing a course certificate*, 8.2. *Post Course Certificate*, 8.3. *Cooperation with an independent certificate company*

### **9. Company**

9.1. *Commercial or non-profit companies*, 9.2. *Association resources*, 9.3. *Species of organization*

### **3. Evidence**

When we compare the contents of lessons what MOOC platforms do present, almost all are seen what they offered by interactive videos and video conference. When having a look to topic title, can be said that all platforms provide lessons on various topics. When to examine interaction title, which shows the examination situation of lecturers interaction and studies with student, Coursera, Saylor, FutureLearn, UDACITY and CourseSites ensure activity such as mini exam, homework and course project but others support homework and course project well as mini exam. Under environment and student collaboration title all platforms give opportunity of discussion forums. A trained team of all platforms consist of reputed professors from distinguished universities or well-known persons on their branch. It is a partnership studies of all platforms with university and college, Saylor EdX, FutureLearn and CourseSites platforms has ensured high credit of college opportunity as well. Most of the courses are free, although there are certificate costs in most of the platform. While certificates usually are usually given as a course completion certificate sometimes are organized jointly with an independent certificate company. All platforms have been in the category of commercial or non-profit companies.

### **4. The Result**

The FMOL platforms which enable active lessons achieve with large mass soon became big news in the press and broadcasting organizations. By the way, many agencies and organizations started to develop FMOL platforms cooperate by their self or with universities and they have started to present lessons over these platforms. At this study, the research we have done has been achieved 55 platforms and has been examined 11 platforms of them which have course more. Resulting in evidences has been achieved, although platforms have any pros or cons against each other generally can be reached the result that handling characteristics are similar.

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