

# Chapter 6

## MOOC for Student Learning and Active Engagement

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### ABSTRACT

*Online education is currently led with MOOC education platform in a scalable way to satisfy the need of the specialized student community. With the adoption of MOOC, students not only study for course credits, but also to learn the newest technologies in the market. Several MOOC providers offer thousands of online courses using knowledge experts in the fields. Thus, MOOC fills the knowledge gap between the academics and industry by offering the on-demand courses, which may not be available in the course curriculum. These MOOC courses are offered either free or payment. At the successful completion of the course, most MOOC platforms give the certification to the participants. MOOC is already doing revolution in higher education and online education. This chapter deals with MOOC model and its evolution and need. The different types and categories of MOOCs are listed. The different MOOC providers and their course criteria are also discussed. This chapter identifies and narrates the implementation issues in the MOOC model. The future research challenges are also summarized.*

### INTRODUCTION

With the advent of web based systems and the high internet speed, Technology Enhanced learning (TEL) is growing rapidly. MOOC (Massive Open Online Course) is an emerging online platform for engaging the students from diversified locations in the country. Adaption and implementation of MOOCs is getting more popular in leading universities around the globe. MOOC based online learning platforms such as Coursera, Edx, Udacity, MiriadaX and IITBombayX are gaining the increasing number of student enrollment ratio on every year and for every course. Because of new web based technologies such as cloud computing and big data, the content creation cost of MOOC courses has been reduced, thus allows MOOCs providers to make available their content for free to the learners located anywhere with internet access. Totally Four thousand two hundred MOOC online courses were launched and of-

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ferred by various MOOC providers from 500 universities in the year 2015, in which 35 million learners participated (Sunar et al, 2016).

Mostly, adults and professionals enroll these courses for learning and certification in a specific field. It induces self-learning through collaborative and engaged course curriculum. Also, it offers the flexibility for the learners to access the course materials from anywhere and anytime using the LMS (Learning Management Systems) such as Moodle, Edmodo, etc. MOOC facilitates the configuration of the personal preferences for the students to decide on what they study and where they have to study (i.e., both on-campus and off-campus). The assignments, quizzes and discussion forums can be created, submitted and evaluated in MOOC in effective manner. Peer review of the submitted assignments can also be done in such systems with results are published online. MOOC definition is represented in Figure 1.

(Gore, H, 2014) defines the MOOC with four principles:

- **Massive:** Not required to bother on number of registration (with enrolment in some cases exceeding 100,000 students);
- **Open:** By exploiting the broadly available Open Educational Resources(OER) and allows open registration (however various MOOCs have pre-requisites, and for fee registrations, examinations or certificates of completion);
- **Online:** not required the physical face-to-face participation and attendance; and
- **Course:** The concept of a pedagogically designed learning journey.

MOOC is the evolutionary education technology for distance based learning by which several thousands of students can be actively engaged with the common goal. The expertise and knowledge of the teacher can be reached to the highest possible number of students interested in accessing that expertise. MOOC integrates the connectivity of social networking, the facilitation of an acknowledged expert in a field of study, and a collection of freely accessible online resources. Usually, MOOC is open to all and can be accessed free of charge, can be certified by the provider technology platform, in recognition of

*Figure 1. MOOC definition*



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