

# Learning from MOOCs: The Role of Mentor Qualities

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## ABSTRACT

MOOC learners are able to share responsibilities for their learning. In the same note, course mentors play an important role in improving learning outcomes, assessment and enhancing learning activities. The aim of this paper is to determine some methodologies and approaches that can guide and help course mentors in teaching and management their MOOCs.

## Categories and Subject Descriptors

K.3.1 Computer Uses in Education: Collaborative learning; Computer-managed instruction (CMI) and Distance Learning; J.1 Administrative Data Processing: Education.

## Keywords

Massive Open Online Courses; MOOCs; Personalized MOOC; Learning Analytics; Recommender Systems.

## 1. INTRODUCTION

The development and practice of Massive Open Online Courses (MOOCs) is currently dominated by Higher Education Institutions. Although open online learning is gaining terrain in other settings such as and corporate education [1], it is in universities where most MOOC production occurs. If universities are the main habitat of MOOCs, it is fair to assume that these are developed in line with the currently predominant focus on Outcomes Based Education (OBE), following the “Constructive Alignment” principle [2]. In this model, learning activities and assessment tasks are designed towards the attainment of a set of learning outcomes as shown in Figure 1. The alignment of these three dimensions is what it is thought to lead to effective learning in universities, and in MOOCs by extension. Despite the student-centric approaches that dominate online education, the role of the mentor is crucial in the constructive alignment of effective learning. This position paper will therefore draw on the role of the mentor in the triangle of effective learning by exploring each of its dimensions, and addressing the following questions:

How does the mentor support MOOC participants in achieving their learning outcomes?

How does the mentor guide MOOC participants to evaluate

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Conference '10, Month 1–2, 2010, City, State, Country.

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themselves, independently from their teachers?

How does the mentor support interactive learning activities in MOOC scenarios?

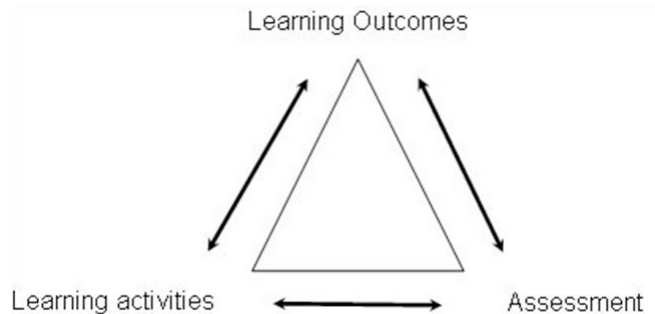


Figure 1: Triangle of Effective Learning [2]

## 2. LEARNING OUTCOMES

Previous studies have reported that, current xMOOCs are based on cognitivism, constructivism, and sociocultural learning theories [3]. On the other hand, cMOOCs model are based on connectivist vision that provide a “creativity, autonomy and social networked learning” [4]. The challenge now is how MOOC participants can find effective academic advising resources to improve their learning outcome. Conole [5] considers the different learning models accompanying with different types of MOOCs. Furthermore, she introduces the 7Cs of Learning Design framework, which aims to provide course mentors with the necessary guidance they need to improve the learning outcomes. It consists of the following elements: Conceptualise, Capture, Communicate, Collaborate, Consider, Combine, and Consolidate [5]. Moreover, we suggest asking volunteers from the course participant to offer the learning assistance to solve individual problems and provide scaffolding learning assistance.

## 3. ASSESSMENT

The current versions of MOOCs use electronic assessment (e.g. short quizzes containing for instance multi-choice and short answer questions). These online assessments are still limited in evaluating learners’ assignments effectively [6]. In order to support MOOCs participant to evaluate themselves, independently from their teachers, numerous studies recommend a wide range of assessment strategies such as self-assessment, peer-assessment and open assessment [5] [7].

### 3.1 Self-Assessment

Kulkarni et al. [7] demonstrated peer and self-assessment as a promising opportunity to open assessment at large scale classrooms. There are self-assessment types that can be used as

decision support for this purpose including: reflection logs, weekly self-evaluations sheet, self-assessment checklists and inventories [8]. MOOC participants get through this the possibility to evaluate their achievement, skills and learning outcomes. The self-assessment approach is carried out independently. The result is only shared with the individual students. The result is given as feedback regarding the personal interests and suitability for the learning activities.

### 3.2 Peer Assessment

Peer assessment is an evaluation methodology whereby learners take responsibility to correcting their peer's work (i.e. assignments, projects, tests) based on specific rubrics [9]. In fact peer assessment allows mentors to share some of the evaluation and feedback burdens with MOOC participants. In that respect mentors should provide scoring guide to their students as a benchmark they can follow when assessing specific components for the assignment task [10]. Bachelet et al. [11] conducted a large peer assessment study included 4650 papers, each graded by 3-5 peers as well as by instructor. The authors further recommended multi loop review process of four reviews in order to obtain a quality final grade and avoid students' withdraws [11].

### 3.3 Open Assessment

Open assessment is an evaluation practice that allows widespread participation in a transparent and freely accessible process [12]. This form of assessment comes from the industry sector. It essentially differs from other assessment methods in terms of its degree of openness [12]. In this regard we suggested that, course mentors should write clear and definite instructions of the assignment tasks, daily review the evaluators' comments, update the evaluation rubrics, and provide supportive scaffolding for evaluators upon request.

## 4. LEARNING ACTIVITIES

In both formal and informal online learning processes, the role of the mentor in guiding learning activities has been widely explored ever since online learning exists. Berge, for example, divides the role of the mentor into pedagogical, social, managerial, and technical [13]. Salmon [14] proposes a 5-stage model in which the mentor starts by facilitating access to learners and motivating them, and finishes by getting learners to reflect upon their own learning process. Salmon also introduces the concept of e-tivities [15], a model in which learners work with other learners and mentors towards the completion of a set task. Both Salmon and Berge have been highly influential on how MOOCs are currently mentored, especially in the support of the learning activities, rather than in its design.

## 5. CONCLUSIONS

MOOCs can be a rich and powerful learning resource for potentially thousands of learners around the globe. This paper has argued that mentor support in the delivery stage of a MOOC is an added value towards the attainment of effective learning. Mentors in MOOCs can contribute to enhanced learning outcomes by supporting the alignment of assessment and learning activities. Therefore, it is suggested that the design of a MOOC takes into consideration how each of its activities and pieces of assessment are going to be supported by mentors.

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