

# **Challenge and Response Analysis for MOOCs**

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#### Abstract

MOOCs develop in a few years, it is the core vocabulary in education. In the face of MOOCs, such as the high drop-out rates and low completion rate also are the challenges and difficulties in the process of localization. Comprehensive review and actively respond to MOOCs is the inexorable path. The methods such as expand the evaluation standard system, build online class learning culture, have become effective means to deal with the MOOCs realistic problems.

Key words: MOOCs; Challenge; Response

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#### INTRODUCTION

MOOCs namely Massively Open Online Course, because of its scale, quality, opening and other characteristics has been popular around the whole world within just a few years. Beijing university, Tsinghua university are also joining in. MOOCs have gradually become a hot spot of research at home and abroad, especially in recent three years, it drew the attention of domestic educational field. So what opportunities and challenges have MOOCs brought to China' education? How should we respond to them? All of these questions need rational observation and calm consideration.

# 1. THE ORIGIN AND CHARACTERISTICS OFMOOCS

MOOCs developed just a few years time, but has become a hot words in educational field. There are some reasons for the born of MOOCs, it also experienced long formation and evolution, it is a inevitable outcome due to the development of online education and open education in modern education.

The MIT Open Course Ware (MIT OCW) in 2001 and the movement of Open Education Resources (OER) have both lay a sound platform and foundation (Li, 2012). In 2007, the open courses-Introduction to Open Education of American scholar David willy and Social Media and Open Education set by Canadan doctor Alec Couros became the rudiment of MOOCs. In 2008, Stephen Downes and George Siemens started the course of Connectionism and Connection Knowledge, and started a new learning model in Canada, they expected that this new learning model can establish a new type of teaching based on connectionism and socialist ecological system. This course is also viewed as the beginning of MOOCs (Mu, 2011). In the same year, several researchers of University of Prince Edward Island called this new type of teaching mode MOOCs, namely Massively Open Online Course. According to the original design concept, designers can share high quality education resources with tens of thousands of or even more learners of different study backgrounds and locations. The course opens to learners who want to obtain credit and anyone of society. The learner's learning style is no longer the traditional teaching and learning, but through the computer network, and according to their own characteristics, flexibly arranges learning progress, and study anytime and anywhere. This includes the mutual interaction between learners. MOOCs also impacted the traditional model of online learning, and received a fanatical fans in a short time. Universities of The United States, Britain, Canada and other developed countries have involved in the wave of MOOCs, and now more than 600 followers distribute in over 220 countries.

MOOCs, namely Massively Open Online Course, in terms of its name, Massive, Open, Online and Course are its most distinctive four characteristics (Ren, 2010).

Massive: the massive of MOOCs can be fromed in two aspects. First, large quantity of the course. In just a few years, the number of learner of MOOCs has exceeded 6 million, which is a incredible number for any teaching form in the past. Because the flexible learning schedule, free participation form and qualified course arrangement attracted many learners with different background around the world. Second, large scale refers to the extensive participation of teachers. Teachers in the process of learning are not only an educator, but also their own professional promotion participants and practitioners. Learners and teachers widely involved in curriculum construction in the learning process, and constantly learn and improve. Many excellent education teaching resources and frequent interaction between teachers and students, become a good platform for teacher's professional development.

**Open:** the openness characteristic of MOOCs mainly reflects in three aspects: the knowledge background of the learner, learning time and study area. As long as have their own subjective interest and intention, the learners can join in learning activities, no matter they are students or family women, doctors, farmers, and whether they are primary school or PhD students. Learners can arrange the learning process according to their own time, also can participate in the lesson in any coner of the world where can surf the internet. This open approach of learning can make no social distinctions in teaching. This is the necessity of globalization trend, also the effective extension of the open education resources movement.

**Online:** online mainly bases on network learning. The difference between previous online learning is that MOOCs fully carry out online interaction between teachers and students, two-way learning, rather than oneway course, which has broken through traditional study form in a real sense, and become a new mode of education based on new media technology.

Another characteristic of online embodied in the large data background, learners' learning process, grades, academic performance can be clear by storaging, managing and analysing online data.

**Course:** the main characteristic of course reflected on the role conversion of teachers and students. The "overture class" has impacted the traditional core status of teachers, teachers are no longer the leader of class, but the guider of learners, guide learners found problems and conduct interactive discussions in learning process, the curriculum can be changed anytime according to students' questions and progress, truly realized a student-centered teaching design.

# 2. PROBLEMS IN THE DEVELOPMENT PROCESS OF MOOCS

Along with the trend of MOOCs on the rise, many universities in China have joined in. Beijing university, Tsinghua university, Fudan university and other domestic well-known colleges and universities have set up their own research organization of MOOCs, and actively involved in the construction of an international MOOCs. But as far as the present state is concerned, high drop-out rates and low completion rate are still the problems to be solved in the development of MOOCs. Take the Open University of UK for example, the graduation rate was only 22% in 2010, dropout rate of the remote education of U.S. was about 70% (Jiao, 2011). In the face of such a new thing, scientific and reasonable analysis of facing difficulties and problems in the process of its development is necessary.

#### 2.1 Quality of Study

MOOCs opened to social groups and public. This is one of the significant characteristics of MOOCs. The large number of learners and learner's background, level and progress has posed challenges to the development of MOOCs. By means of computer to monitor and analyze learners' learning process and quality can alleviate these problems, to guarantee the education quality of the course learners. However, large quantity and differences are incomparable to traditional small class. So how to ensure teach learners according to their aptitude in maximum, focus the growth and development of learners as much as possible is the primary question faced by the current development stage.

#### 2.2 Learning Atmosphere

MOOCs is a large-scale online education courses based on a network platform. Due to internet, learners can study courses regardless of time and location. But, because of network learning, learners' learning activities are limited in the classroom, so extracurricular classmates interactive, emotional transmission between teachers and students can only rely on the network classroom. People as the main body in education make it one of the important characteristics differ from other production activities. The learner's skills, survival skills, communication, integrated ability is confined to the classroom learning, and also what course learning cannot match. The ability to learn and learning atmosphere is two of the limitations of MOOCs.

#### 2.3 Evaluation Standard

There are two major difficulties in evaluating the system. One the one hand, MOOCs expected evaluate student's learning situation through computer. For courses with fixed answers, the network test can make fast effective scientific and accurate evaluation to students' grade. However, for those without standard, such as composition and discussion and other test with strong subjectivity, divergence, innovativeness, computers cannot give a unified standard to quantify tens of thousands of students' performance. This puts forward a new challenge for the further development of MOOCs.

On the other hand, the evaluating is completed through computer assistant teaching system, while computer and network can not identify whether it is true of course assignments. Whether it is the real learning level of learner, or under other learners' help, is unable to know.

#### 2.4 An Invisible "Threshold"

MOOCs is a social public course. Even so, excellent MOOCs platform tends to set up rely on excellent universities in the west. These excellent courses often took English as a mainstream language, these virtually limit the audience, and form an obstacle to non-native English speak learners. If learners want to learn a certain course of MOOCs eagerly, first of all, he must have a certain basic knowledge of computer or network toregistrate successfully. At the same time, in the process of learning, they need a certain basic knowledge of English to follow up learning content. These are invisible thresholds in the construction of MOOCs.

#### 2.5 Design of the Course

In traditional teaching course system, we tend to set up courses in accordance with the formulation system of training plan, and students according to the annual increment to learn from easy to difficult level, the curriculum has strict logical nodes. But for MOOCs, learners tend to choose the course according to their own interests, without strictly considered the progressive of course content. The differences in background and level of learning put forward higher requirements to course content. For the design of the course content, it need to meet the needs of network teaching, make lessons an independent, organic learning system, so that learners can arrange the learning process according to their own different situation, rather than impact study because of the order of course selection.

# 3. COPING STRATEGIES OF MOOCS

The development trend of MOOCs is unpredictable, but its impact on China's education is destined to be farreaching and extensive. Making in-depth analysis of MOOCs, and combining with the advantages to develop a local MOOCs is an innovation of China's education to continue moving forward once again. In the face of difficulty of MOOCs, we need to review comprehensively and response positively.

#### 3.1 Teachers Adapt to the New Teaching Model

The emergence of MOCCs changed the model for hundreds of years of traditional teaching, teachers and students get together in the same space – schools to make teaching activities, and for MOOCs, numerous teachers and students interact in a virtual network space, so the traditional behaviorism, constructivism concept of teaching are impact by connectionism. Teachers' central position is also gradually shifted, in the face of such forms, teachers must fully grasp the data mining technology, "turn up classes", "micro class" and other new teaching modes, to adapt to the needs of the development of learners' learning.

#### 3.2 Strengthening the Learning Support Services

Due to the large number and different background of the learner, and many of their lack of the ability of initiative participation, so it is particularly important to give attention to them. For many learners, from registration, they need to accept a special service. Analyzing students' psychological condition according to data and response to the knowledge points, and combined with cognitive science, behavioral psychology and other discipline knowledge, and making timely intervention, to ensure good learning effect. This kind of comprehensive, continuous learning support services can promote learners' learning quality, effectively reduce dropout rates.

#### 3.3 Developing Multiple Evaluation Standerd

For test of many students, students mutual evaluate become an effective way to overcome this obstacle. Through mutual evaluation among students can find problems in study, enhance the interaction among classmates. For the authenticity of the test of students, there is still a long way to go. At present, MOOCs platform is committed to by learners' type rhythm and speed to identify its authenticity, but it remains difficult to achieve.

# 3.4 Constructing Cultures of Online Learning Classes

According to learners' interest of learning, source place and employment situation and other basic factors. Dividing learners into online classes of 30 to 1 (Zhang, 2013), and making learning interaction in classes, or the teacher "one-on-one" coaching communication some time, in order to sustain learners' learning motivation, maintaining high quality of learning. In network class MOOCs can use network platform, blogs and other new media technology, fully demonstrating the characteristics of the members of the class, establish a harmonious and progressive class culture, promoting the emotion between teachers and students and the class's and grade's cohesive force, to cultivate students' ability to actively participate in online learning.

#### CONCLUSION

MOOCs is an inevitable result in the development of online education and open education. With the development of technology, maybe MOOCs is just a short stage of development. In the process of education development, except the advantages which technology has brought people, more attention should be placed in the core position of people in education development. In the face of difficulties of MOOCs in its development, we should stand in the perspective of learners, fully consider the pros and cons, so that giving learners more excellent education service resources to achieve the goal of making no social distinctions in teaching in the true sense.

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