

# Research on Problems and Countermeasures of MOOC in Teaching

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**Abstract**— MOOC is sweeping the world, and it has been popularized on a large scale in China. Each university or self-built MOOC courses, or the introduction of high-quality MOOC resources. This paper analyses and studies a series of problems arising from the integration of MOOC and higher education teaching, and improves them through corresponding suggestions and countermeasures. It has certain theoretical and practical significance.

**Keywords**—MOOC, Resources, Analyses, Significance

## I. INTRODUCTION

The initial development of MOOC (Massive Open Online Course) large-scale open online courses is online education. In 2012, Udacity platform of Stanford University rose, and then Coursera platform was founded. MIT and Harvard University established edX platform, and three mainstream MOOC platforms were built. 2012 is called the first year of MOOC.

MOOC has changed the traditional learning mode, realized the sharing of high-quality educational resources, and promoted the fair competition of education. While MOOC brings opportunities to higher education, it also faces unprecedented challenges. We should rationally treat MOOC's position in higher education and return it to the essence of online courses.[1]

Strict and standardized teaching management is the key to improve the quality of teaching in Institutions of higher learning, and education and teaching management is the core of management in Institutions of higher learning. [2] Teaching management in Colleges and universities should ensure the orderly conduct of teaching work, mobilize students' learning initiative, change the traditional teaching mode, and then improve the quality of teaching.

Online open courses and their learning platforms have brought a series of changes to university content, teaching methods, teaching modes and teaching management system. Institutions of higher learning should establish online curriculum management, evaluation and incentive mechanism according to their actual situation, further strengthen curriculum management, credit management, credit recognition, etc. to ensure the improvement of teaching quality.

The rapid development of MOOC large-scale online open courses not only brings new opportunities to the improvement of teaching quality in higher education, but also puts forward new requirements for the innovation of teaching management in higher education.

## II. CORRESPONDING PROBLEMS AND COUNTERMEASURES

MOOC integration into higher education, analysis of problems arising from teaching management in Colleges and Universities.

The management system of online course construction is not perfect enough.

The rise of MOOC has promoted the development and integration of educational technology and information technology. [3] MOOC should not only support teaching facilities, platform support and hardware facilities, but also have a better management mechanism for online courses.

## III. OVER-MECHANIZATION OF STUDENT PROCESS MANAGEMENT

In the process of MOOC learning, teachers can set the weight of various learning resources. For example, if all the videos are watched more than once, the platform will record the corresponding students' learning behavior, and this part of the score can be obtained. But this is only the record and management of learning behavior, and cannot objectively evaluate the learning effect of students. [4]

There are some difficulties in determining students' credits after their study. Only in some developed regions and cities, some colleges and universities have established models of credit mutual recognition, exchange and complementarity. [5] In other areas, there are still great differences in students' grades and learning abilities. There is no uniform criterion and standard for the mutual recognition of credits.

## IV. PUT FORWARD SOME COUNTERMEASURES TO SOLVE THE PROBLEMS AND IMPROVE THE TEACHING MANAGEMENT.

Establish the advanced teaching management concept of keeping pace with the times.

Improve the management of online courses, and then steadily promote the implementation of courses, establish a professional, high-quality online course construction team. [6]Accelerate platform construction and realize friendly platform alliance.

Perfect the learning management methods for students and explore new criteria for examining students' learning evaluation in an all-round way. [7]Students' online learning behavior records occupy a certain weight. Teachers should take the students' curriculum performance interaction, questions, homework, tests and so on as a certain weight. Through face-to-face teaching, teachers can better understand each student's learning situation and learning state. For an individual student's evaluation, it can also make a comprehensive evaluation of students' self-evaluation, mutual evaluation among students and teachers' evaluation of students.

#### V. THE COUNTERMEASURE FOR THE COURSE OF "COMPUTER FOUNDATION"

"University Computer Foundation" course is a general course for non-computer majors, aiming at improving students' information literacy. The course mainly teaches computer basic knowledge and software related knowledge. It is difficult to memorize theoretical knowledge, and the operation knowledge is trivial and tedious. Classroom teaching adopts the combination of theoretical explanation and practical operation.

Generally, traditional teaching methods are adopted. Teachers teach theoretical knowledge and cooperate with multimedia courseware. Some teachers demonstrate first, and then arrange students to practice. The explanations in the theoretical part often stop at a glance, and the practice part does not have enough time to practice well.

Traditional teaching methods generally use project-driven, case-based teaching, etc. Making full use of various teaching modes is conducive to mobilizing students' learning enthusiasm, but limited class hours and tense teaching tasks have not received good teaching results. The traditional way of learning makes students not learn thoroughly enough. [8]Most of them are "drawing on the gourd". The whole classroom is controlled by teachers. It is totally "teacher-centered" and students are in passive learning. The assessment method is single, the interaction between teachers and students is less, and the teaching effect is general.

#### VI. ADVANTAGES OF MOOC-BASED LEARNING MODEL

The traditional classroom teaching is based on the teacher's classroom instruction, presenting various resources prepared before class in different forms, giving full play to the teacher's leading role. In this teaching mode, students only passively accept knowledge and learn passively, which limits students' participation. [9]Through MOOC learning, students can make full use of the fragmented time and arrange their own learning. They can watch the key and difficult teaching videos repeatedly. They can not only do a good preview, but also review adequately. Between students and teachers, students can also communicate and interact through online platform, free from the limitation of time and space. In the traditional classroom, the form of interaction between teachers and students is relatively single. Generally, teachers ask questions and students answer them. Through the MOOC platform, students can initiate online discussions and share learning experiences in response to questions or good experiences. The puzzlement of oneself can be solved in time, which stimulates students' enthusiasm for learning.

#### VII. DESIGN OF TEACHING MODE BASED ON MOOC

The new teaching mode should emphasize the idea of "teacher-led, student-oriented". First of all, we should understand the students' learning conditions, mainly including the students' preparatory knowledge, professional needs and so on. Choose high-quality MOOC resources, if conditions are available, you can also build MOOC courses. [10]Determine the orientation of this course, teaching objectives, and the role of professional training. The whole course is designed. According to the syllabus, the content of each lesson is planned, the arrangement of the course and the activities of the classroom are arranged. Reasonable teaching design is the premise and important guarantee for the effective implementation of the whole teaching activities.

Students learn independently before class. Teachers publish the content of self-study through MOOC platform, requiring students to complete their study independently. If they encounter problems, they can publish discussions or find more ways to solve problems in some discussions and think from different perspectives. Independent autonomous learning mobilizes students' learning initiative, and mutual sharing and communication enhances students' learning enthusiasm.

Teachers, as the leader in class, initiate various activities, such as check-in, questionnaires, voting and so on. [11]Students actively participate in them. In class, the students take the group as the unit to carry out group interaction and group mutual evaluation, which greatly arouses the students' enthusiasm for learning.

After class, the teacher arranges corresponding exercises. The exercises are divided into mandatory exercises and optional exercises to meet the needs of students at different levels.

By using MOOC and combining with physical classroom teaching, the hybrid teaching of online and offline has been realized, and good teaching effect has been achieved. [12]

## VIII. SUMMARY

This paper analyses and studies a series of problems arising from the integration of MOOC and higher education teaching, and improves them through corresponding suggestions and countermeasures. It has certain theoretical and practical significance.

Through the corresponding research, we can properly enrich the research results in related fields. To discover and foresee some problems existing in the teaching management of colleges and universities, so as to provide strong support for better improvement and improvement of teaching management.

Teaching management always serves teaching. Through this study, we can promote the real localization of MOOC. Teaching management in Colleges and universities is the basic and important guarantee for realizing teaching objectives and improving teaching quality. It is hoped that through this study, we can make full and reasonable use of information technology, deeply understand the trend of integration of MOOC and higher education, and put forward corresponding countermeasures for the problems of higher education teaching management after the introduction of MOOC.

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