

Reflections on "Campus MOOC" Based on Network Teaching Platform

Zhuang Shiwen

Shandong Jiaotong University, 250023, China

Abstract: MOOC has attracted global attention in colleges and universities. "Campus MOOC" combines traditional classroom teaching and the advantages of MOOC, the traditional classroom and online learning network to develop teaching by "Flipped Classroom" and blended teaching methods. This paper makes analysis on the factors influencing "Campus MOOC" from the aspects of teachers' information technology teaching ability, students' learning attitude and technology learning ability and supporting policies of the universities. This paper researches how to develop "campus MOOC" from the viewpoint of resource organization of classroom teaching, activities of teachers and students activities, and interactive mode and other aspects.

Keywords MOOC; "campus MOOC"; teaching reform

INTRODUCTION

With the development of computer network technology, mobile network, cloud computing and big data, the information tide is making a profound impact on all aspects of human society. The rise of MOOC (Massive Open Online Course, a large-scale online open courses) is drawing the extensive concern of the education circle. More and more universities including Harvard University, Massachusetts Institute of Technology, Stanford University and Princeton University and other famous universities are joining MOOC ranks. Peking University, Tsinghua University, Hong Kong University of Science and Technology, Tokyo University all have announced the launch of MOOC courses. All these cause the public concern of the education administrators, researchers, teachers and students on MOOC. It is generally acknowledged that MOOC will exert a profound and important influence on internationalization, informatization, and democratization of higher education. The development of MOOC will bring great impact on higher education institutions and will lead to education reform.

1. MOOC and university teaching reform

As a new form of online education, MOOC has developed c-MOOC based on connectivism learning theory and x-MOOC based on behaviorism learning theory. The former emphasizes the creation, creativity, autonomy and social network learning; while the latter emphasizes the video presentations, quizzes tests and other traditional learning method. In other words, c-MOOC pays attention to knowledge creation and production, while x-MOOC pays attention to knowledge repetition.

In China, MOOC began to gain attention from 2012, which quickly become a very important part of teaching and learning. Generally speaking, it has become an inevitable tide for the change of high education from single face-to-face teaching mode to online mode or mixed mode. It has become the focus to promote the innovation of talent cultivation model and the reform of mixed teaching with MOOC by the new MOOC model and online education. The scientific approach is to combine MOOC with normal university education so as to give full play to the advantages of both, and let them promote each other.

At present, the mixed teaching of online teaching and traditional classroom teaching will inevitably become the main direction of university teaching reform. A balance of x-MOOC and c-MOOC provides new model for this kind of mixed teaching design. The teaching resources such as lectures, reading materials and videos can be taken as online resources, and the teachers could get suggestions and feedbacks from the students who have made preparations. Consequently, the emphasis can be paid to deep discussion and problem solving and creation thinking, and in this way, flipped classroom or inverted classroom can be achieved. This paper tries to discuss the construction of campus MOOC based on network teaching platform.

2. the practice of construction of campus MOOC

There are more than 40 international MOOC platforms presently. Compared with traditional network teaching platform, the present MOOC platform still need improvements, which provides a stage for the construction and application of the practice of the construction of campus MOOC. Shandong Jiaotong University imported a network

teaching platform developed by Institute of Modern Educational Technology of Tsinghua University , which provides a digital teaching environment for the teachers, students and teaching administrative staff. They can make teaching interactions, sharing resources, and supervising process, and monitoring qualities. The platform includes teaching outline, teaching calendar, information of the teachers, course notice, discussions, course questionnaire, teaching mailbox, teaching notes, individual resources, course assignments, online tests, and course management, these modules totally conform to the idea of MOOC , and can meet the need of flipped classroom, and it provides a platform for the teachers to develop mixed teaching.

MOOC based on network teaching platform makes a combination of traditional teaching and the advantages of MOOC, and it takes flipped classroom as the main mode of presentation. Use the MOOC for reference, traditional teaching and network classroom can be combined deeply in campus MOOC, for which network teaching platform can provide teaching resources, trace study progress, enrich interaction between teachers and students.

"Campus MOOC" combines the advantages of traditional classroom teaching and MOOC. It exerts the advantages of preparation before class and review after class and the interaction between teachers and students, and it makes a combination of traditional face-to-face teaching as well as traditional classroom teaching and network online study. It takes the as the main form in resource organizing, flipped classroom in teaching model, which embodies the characteristics of mobile learning and digital learning. This model improves the teaching pertinence, and provides theoretical and practice reference for improving the teaching quality and optimize talent training level.

2.1 to form a study group

To form a study group can cultivate students' cooperative learning ability and team spirit, and it can meet the students' need of online or offline interaction and exchange. It is the base of problem discussion and program cooperation. Study group constructs a group collaborative learning for individuals and groups, and lays the foundation for carry out extensive online and offline learning.

2.2 the teachers' pre-class activities

The teachers' pre-class activities include resource organizing, paying attention to feedback and teaching design. in resource organizing, the teachers should organize and build kinds of resources such as internet resources and lecture videos, and upload these resources to corresponding position in the network teaching platform, and propose corresponding study requirements. In the stage of feedback, teachers should pay close attention to the students' study status, timely catch and conclude the problems, and give the students proper directions. In the process of teaching

design, the teachers should make meticulous teaching design on the questions involving common difficulties. In this way, the students can gain more from the new teaching method and the teaching pertinence will certainly be improved.

2.3 the students' pre-class activities

The students' pre-class activities include reading course notice, study course carefully, recording study process, and solving study doubts. Firstly, the students should read the course notices carefully and examine the teaching resources and reading requirements by joining in the network teaching platform. Secondly, the students should study the teaching materials such as PowerPoints, teaching materials and reading materials, and finish corresponding tests and exams. Thirdly, the students should record study process and reflect the applying of what they have learned. Fourthly, the students should make full use of the study groups. They can discuss with group members, which can help to solve their problems. They can also make feedback to the teachers so as to solve the problems.

2.4 classroom activities

Classroom activities of teachers and students are mainly divided into 3 types: teachers' answering-questions, assignment instruction, and application sharing. In teachers' answering-questions, the teachers should make explanations to the common questions raised by students on the basis of feedback before classroom teaching. Meanwhile, the key points and difficult points should be emphasized, so as to highlight the teaching focus and to solve the students' questions. Classroom assignment instruction is what flipped classroom different from traditional classroom. The teachers can help the students to finish the corresponding work and tests, and help the students to consolidate their knowledge and improve their skills. Application sharing refers to the teaching form that teachers exhibit and evaluate the creation works in teaching. This form is the continuation and application of basic knowledge and basic skills. In this way, the students' skills can be improved by sharing and evaluating, and the goal of deep-going appliance can be reached.

2.5 interaction activities after class

Interaction activities after class between students and teachers mainly includes 3 aspects, knowledge consolidation, study exchange and application improvement. The exchange and communication between teachers-students and students-students is mainly carried out on discussion area on the network teaching platform, and it can also take the form of BBS, blogs, wechat, and other software. This exchange and communication maybe knowledge consolidation, skill improvement, methods sharing, and application discussion of knowledge and skills. It can take the form of single tutorship or group tutorship, or exchange of the students. The advantages

of social intercourse softwares should be brought into full play, and combine the MOOC study idea, network teaching platform, mobile study and classroom teaching, and the interaction between teachers and students can be achieved, and teaching quality is thus improved.

3 construction and application of Campus MOOC

Construction and application of Campus MOOC is closely connected to the teachers' information level, the students' learning attitude, and information learning ability, and the supporting construction of the universities.

3.1 the teachers' information level

The development of computer network technology plays a vital role for teachers to integrate teaching resources. There are various kinds of learning resources on the network.

On one hand, teachers should make full use of the existing cyber source to provide rich internet learning environment for the corresponding courses, and to construct learning resources library for students; on the other hand, with the rapid development of Web-technology, teachers - combining with the characteristics of the course and their actual work - can also build "micro class" teaching resources suitable for students through video recording, recording screen, and integrated editing. This is one of the advantages that informationization brings to education, and this also puts forward high requirements to teachers' information technology teaching ability. How to improve the teachers' information technology ability, and improve teachers' informationization teaching level is the key problems to be solved.

3.2 students' learning attitude and informatization learning ability construction

Surveys show that students' learning attitude is the key factors deciding the teaching effect no matter what kind of teaching methods are adopted. The method of flipped classroom teaching puts forward higher requirements to autonomous learning of the students. Teachers should seriously consider how to guide and supervise the students' active participation in the course of learning, and guide students to learn consciously and actively.

The teaching model of flipped classroom mode fully reflects the depth of integration and application of the Internet technology and the classroom teaching, which is beneficial to the student's learning. And the factors that whether the students have necessary skills for online studying and for online resources using affect the application effect of "campus MOOC". Thus, how to effectively improve students' information and learning ability is a problem that must be solved.

3.3 Supporting measures

The universities should provide necessary network infrastructure, wireless network learning environment and resource platform supporting all kinds of digital learning. Formulation of curriculum assessment and evaluation of scientific standards should be worked out, which can provide necessary policy support for the construction and application of "campus MOOC".

CONCLUSION

MOOC has become a focus of world education especially higher education attention, and it has attracted global attention in colleges and universities. MOOC has been carried out in many universities, which plays an excellent demonstrating function for the teaching reform of higher education in China. By combining the advantages of traditional classroom and flipped classroom, campus MOOC improves the teaching model of university curriculum, changes the students' learning process, and mends the teaching model, which provides a solving train of thought and practice reference for teaching reform.

REFERENCES

- Li Manli: *Analysis on MOOC from the Perspective of Education*, Tsinghua University Press, 2013.
- Wu Jianping: *Revolution of Universities—High Education in MOOC Times*, Tsinghua University Press, 2014.
- Jonathan Haber: *MOOCs (The MIT Press Essential Knowledge series)*, The MIT Press 2014.
- Jeffrey J. Selingo, *MOOC U: Who Is Getting the Most Out of Online Education and Why*, Simon & Schuster, 2014.
- Augusto Failde, *MOOC it: MOOCs in Tweets*, CreateSpace Independent Publishing Platform 2014.