

Research on Teaching Reform in Colleges and Universities under the Background of Massive Open Online Course

Xiang Gao¹, Yanxia Zhang²

¹Guangzhou Medical University, Guangzhou, Guangdong Province, China

²Guangzhou College of Technology and Business, Guangzhou, Guangdong Province China

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Abstract: Mooc (massive open online course) is a new mode of educational communication that uses network media to spread knowledge. Mooc has incomparable advantages in traditional education communication. From content, channel to audience experience, mooc provides new opportunities and possibilities for teachers and students to teach and learn. The advantages of mooc, such as the rich teaching resources, the extension of teaching time and space, the transformation of teaching center and the deconstruction of teaching subject, bring opportunities for the reform and development of higher education in china. Mooc itself is open, which enables learners to enter learning at any time. Driven by the internet, mooc has become a new education communication mode with flexibility and convenience. Mooc provides a brand-new learning mode for learners, provides convenient conditions for them to learn new knowledge, and further promotes the reform of higher education system. This paper expounds the concept of mooc, analyzes the influence of mooc on teaching mode in colleges and universities, and puts forward the measures of teaching reform in colleges and universities under the background of mooc.

1. Introduction

Mooc is a large-scale open network course triggered by internet technology. The emergence of mooc has promoted the teaching reform in colleges and universities. Mooc is a product of the integration of information technology and educational concepts, and has changed from a new educational model to a social phenomenon that has been widely concerned and widely used teaching methods [1]. With the continuous development of the global internet and e-commerce, mooc, a large-scale open online course, has emerged and become the world's largest online education platform, bringing online education to a new level of development [2]. Mooc, as a new mode of internet education and communication, breaks the traditional way of communication between teachers and students. Mooc is convenient to use, low in cost, suitable for a large number of people, and has very rich learning resources. What is the difference between mooc's educational philosophy, educational communication mode and traditional educational communication mode, and how to integrate mooc's teaching philosophy into traditional classroom are all contents worthy of our careful consideration [3]. University education and teaching will break through the shackles of traditional teaching mode under the promotion of information technology, making teaching mode more popular, personalized and diversified. The new open learning model provided by mooc online education has won the favor of the majority of users, so that people around the world can participate in the study of massive curriculum resources through the internet [4].

The essence of curtain lessons is the reform and application of new teaching methods. The purpose of using curtains in college teaching is to enhance the integration and substitution of knowledge, so as to promote the dissemination of professional knowledge and student acceptance [5]. The mooc model is not only widely used in education training, subject exchange learning, but also more and more dominant in the teaching of professional courses in colleges and universities [6]. Information technology is an effective way for high-quality schools to achieve maximum social responsibility. Mooc leads the innovation of educational concepts with information technology and will have a profound impact on higher vocational education. Mooc provides a new learning model

for learners, facilitates their learning of new knowledge, and further advances the reform of the higher education system [7]. Mooc can realize teaching activities across time and region, and therefore has received more and more attention, and even occupied a very important position in the teaching of professional courses in colleges and universities [8]. In the field of higher education in china, the integration of the internet and education has gone through stages such as distance education, network-assisted teaching, and online video public course teaching [9]. This article expounds the concept of mooc, analyzes the influence of mooc on the teaching mode of colleges and universities, and puts forward the measures of college teaching reform under the background of mooc.

2. Challenges Faced by Efficient Classroom Teaching under Mooc Background

Mooc takes curriculum as its product form, selects the world's best teachers, and develops curriculum with world brand effect with technology with distinct sense of the times. Mooc has obvious advantages over traditional teaching: firstly, it breaks the limitation that high-quality teaching resources cannot be shared and provides a large number of high-quality resources for active learners. Mooc is generally evaluated as an innovative educational model based on the revolution of network technology, which is conducive to solving the problems of fairness, sharing and lifelong education. Mooc breaks the time and space limitations of learning. As long as there are computers or mobile phones and other equipment, mooc wants to learn anytime and anywhere, providing convenience for learners. The mooc curriculum teacher team is very important to the mooc construction, so whether it is the curriculum integration or the mooc construction, especially the mooc knowledge points will be more comprehensive and effective after repeated discussions and tempering by the mooc teacher team. In order to ensure the quality of classroom teaching, the number of students in the same classroom will be limited by classroom seats. Mooc is not subject to these restrictions and a large number of high-quality resources can be shared at the same time.

Many local university teachers have not realized that the impact of MOOC knowledge dissemination mode on traditional knowledge dissemination mode will be fundamental and will have a great impact on the teaching role and traditional positioning of local university teachers. In the teaching method, the teacher's emphasis is no longer on rigid knowledge explanation, but more on guiding students to have interactive discussions and troubleshooting, so as to enable students to digest the knowledge points that should be mastered in this class. Because of the particularity of the network, MOOC education has outstanding characteristics and advantages. A preliminary comparison is made between the basic elements of Internet education and traditional education and teaching process.

Table 1 Comparison of The Basic Elements of the Teaching Process between Internet Education and Traditional Education

	Traditional education	Internet Education
Teacher	One course, one teacher	One lecturer and several tutors in one course
Students	Most of them are children and teenagers with similar age and learning basis	Mostly adults and very different from each other
Teaching content	Present teaching content with textbooks	Present teaching content with learning materials
Teaching environment	Class based collective teaching environment	Focus on learners' personal space

The openness of MOOC may provide a new choice for higher vocational colleges in enrollment, teaching, academic certification and student employment. MOOC will link China's higher vocational education with the world. In the worldwide competition, China's higher vocational education will have the opportunity to go to the world and face the challenge of the impact of higher vocational education in developed countries. MOOC not only has a great impact on the traditional teaching mode, but also puts forward higher requirements for teachers' personal professional ability

and professional quality. Educational communication needs input cost, from hardware cost to media cost to manpower cost, which in fact constitutes an obstacle to the popularization of educational communication. The network can overcome the limitation of time and space in the traditional knowledge dissemination mode, make quality teaching resources more widely disseminated, and expand the breadth of knowledge dissemination [10]. The professional work in human society varies greatly, so that employment-oriented vocational education covers a wide range of specialties and courses. The front-line teachers in vocational colleges should become the main force in the development of MOOC for vocational education. Although MOOC mode has been improved to some extent, many educators believe that relying solely on the Internet for talent training and education and communication between teachers and students cannot achieve the advantages of traditional teaching mode.

3. Suggestions on Teaching Reform in Colleges and Universities under Mooc Background

3.1 Change the Traditional Teaching Concept

The accessibility of the network can greatly reduce the learning threshold and cost of learners and enable more people to easily obtain high-quality teaching resources. In MOOC teaching, users can freely choose the courses they are interested in and the teachers they like from the vast amount of course information. In the curriculum setting, we can create vivid scenes, combine teaching with pleasure in teaching methods, and further improve the teaching effect of MOOC class. In the MOOC era, higher vocational teaching reform should focus on the growth of students, integrate the respective resource advantages of schools and enterprises, and cultivate talents for industry, which is the purpose of higher vocational teaching reform [11]. Under the traditional teaching mode, different teachers have different teaching levels, and the number of excellent teachers is limited, so that students in each class cannot obtain the best teaching resources. This differentiated teaching leads to inconsistent quality of personnel training. Higher vocational education personnel training should be based on regional economic construction and social development, adapt to the needs of the job market, and train practical, applied and compound talents recognized by the market.

Under the impact of MOOC, teachers should reposition their roles, transform their roles into leaders and organizers of classroom teaching, and guide students to choose high-quality resources suitable for them according to their own interests. MOOC has realized the student-centered teaching concept and reversed the classroom teaching mode through the seamless connection of online learning and offline learning. Teachers need to be trained in modern educational technology before making online curriculum resources. To enable them to understand the modern teaching design concept, the characteristics and methods of network teaching, and be able to skillfully use computers and network-assisted teaching. The situation of college students' computer ownership and distance learning through computers are shown in Table 2.

Table 2 Statistics of Personal Computers Owned by College Students

Education	Specialist	Undergraduate	Master	Doctor
Number of participants	30	30	30	30
Number of owners	12	16	25	26

3.2 Building a New Teaching Mode

The talent training goal of higher vocational education requires that the education and teaching process should realize the combination of production and learning, which is embodied in the process of enterprises participating in education and teaching, students participating in social practice and working practice. Compared with traditional classroom teaching, MOOC has many advantages, but it also has certain limitations. There are many courses for a major in higher education, but the traditional courses are not suitable for MOOC course construction to some extent. MOOC online online classroom learning cannot achieve real two-way interaction. Although there are online question-and-answer communities that can achieve communication, it is incomparable

with the effect of face-to-face two-way interaction. MOOC, on the other hand, has a large number of high-quality resources and videos of famous teachers, which puts forward higher requirements for the professional standards of university teachers. When students encounter difficulties in watching videos or completing tests, they can go to the course discussion area at any time to interact with students and even teachers and connect with any element in the communication chain. It should be noted that the new teaching mode still requires teachers to make a good teaching plan and play a role in organization, supervision and evaluation. The MOOC currently popularized in the world is generally based on general courses, with a wide range of object-oriented, popular teaching design, and interaction between learners and MOOC platform.

4. Conclusion

With the emergence of MOOC, colleges and universities and their teachers are facing great challenges. MOOC is a new direction for the development of higher education in all countries in the world. MOOC is bound to bring about great changes to traditional colleges and universities in education system, education concept, teaching mode, personnel training and other aspects. Colleges and universities should firmly grasp the development opportunities of MOOC courses, make full use of the information sharing advantages of MOOC courses, give full play to the advantages of MOOC education, optimize the core curriculum of colleges and universities, and vigorously promote the construction and reform of courses and specialties. MOOC, as a new mode of educational communication, has to a large extent realized the sharing of global educational resources and the opening of educational forms. Through the Internet, learners around the world can obtain a brand-new learning experience. The school can demonstrate and adjust the personnel training plan according to the actual construction and application of MOOC. With the popularization of MOOC's new network education, education will become more personalized and popular in the future, and a brand-new teacher-student relationship will also emerge. Higher vocational colleges should adopt an open attitude to accommodate the differences between inter-school teaching evaluation system and teaching management system. For MOOC courses with excellent course quality evaluation, a mutual credit recognition mechanism for MOOC courses between different colleges should be established.

References

- [1] Han Lili. Opportunities and Countermeasures for Promoting MOOC Teaching Reform in Colleges and Universities [J]. *China Modern Educational Equipment*, 2016 (21): 71-73.
- [2] Liu Weijie. Research on the Reform and Effect of MOOC Teaching in “Financial Markets and Institutions” [J]. *Cultural Education Materials*, 2018 (18): 192-193.
- [3] Tang Xianghong. MOOC Teaching Reform of Higher Vocational English Based on Constructivism [J]. *Xueyuan*, 2017 (36): 37-38.
- [4] Nie Guanghui, Yang Li. The enlightenment of MOOCs on the teaching reform of medical psychology [J]. *Research and Practice in Medical Education*, 2014 (5): 947-950.
- [5] Wu Weizhong, Guan Xiaohui, Qu Chaoyang, et al. Thoughts on the Teaching Reform in Colleges and Universities Caused by the MOOCs Wave [J]. *Journal of Northeast Normal University (Philosophy)*, 2015 (2): 190-194.
- [6] Wu Xingjie, Hu Xia, Li Hongsong, et al. Meeting the challenges of MOOCs and deepening the reform of medical experimental teaching [J]. *China Higher Education*, 2014 (12): 32-34.
- [7] Li Zhongwen, Wu Tao, Tang Bikui. Discussion on the application of MOOCs in medical cell biology teaching reform [J]. *Continuing Education*, 2015, 29 (2): 43-44.
- [8] Zhang Li. Problems and countermeasures of college English teaching reform in China under the background of MOOC [J]. *Journal of Chinese Language and Culture*, 2015 (9): 135-138.

- [9] Wang Jinhua, Xiang Hongjun. Thoughts and Explorations on the Teaching Reform of Mathematical Analysis Course under the Background of MOOC [J]. Science Teaching Journal, 2016 (12): 120-121.
- [10] Ouyang Lisi, Luo Tao, Chu Guoliang. Discussion on the Teaching Reform of Human Anatomy under the Background of MOOCs [J]. Anatomical Research, 2015 (1): 78-80.
- [11] Zheng Daifu, You Qiulin, Xiao Zhaofei. Thoughts on MOOC-induced Teaching Reform in Higher Vocational Colleges [J]. Journal of Sichuan Institute of Correspondence Education, 2015 (4): 104-107.