

Thoughts on the Online Teaching Model of Colleges and Universities in China----Based on MOOC Teaching Experience in European and American Universities

Yanfang Xiong

Jianghan University, Wuhan Research Institute, Wuhan 430056, Hubei, China 168142783@qq.com

Keywords: Online Teaching, Traditional Teaching, MOOC Teaching Experience

Abstract: The progress of technology and the development of education always go hand in hand. In the context of Internet + education, educational informatization has become an important connotation and distinctive feature of educational modernization ethics. Fully and rational use of information technology to promote educational reform is an information society needs of the times. Online education will also complement and develop integratedly with traditional teaching, becoming an indispensable part of college education. Especially in recent years, due to the implementation of the "suspension of classes without suspension of learning" education policy in the context of the epidemic, many universities in China have begun to carry out large-scale online teaching. Based on the teaching experience of European and American MOOCs, starting from the connotation and outstanding characteristics of online teaching, this article points out that while online teaching has many advantages, it also needs traditional classrooms to complement their advantages, in order to ultimately achieve the optimal transformation of the teaching model and thereby improve education.

1. The connotation of online teaching:

Online teaching refers to relying on the Internet, with the help of information means, taking the original offline class as a unit, mostly live classes, and adopting a teaching method that combines "recording and broadcasting + online Q&A".

2. Contents and characteristics of online teaching:

As a product of the development of educational technology, online teaching has gradually penetrated into all types of education systems at all levels [1]. It not only changes the traditional education model, but also provides learners with a more flexible learning method. Research has

found that online teaching has the following characteristics Some key features:

- (1) Separation of time and space: Online teaching breaks the physical boundaries of traditional classrooms, allowing teaching and learning to be conducted in different places and at different times [2]. This flexibility greatly facilitates learners, especially those who are unable to participate in learning at a fixed time and place [3].
- (2) Autonomous learning: Online teaching emphasizes student autonomy, and students can learn according to their own pace and needs. This self-driven learning helps develop students' independent thinking and problem-solving skills.
- (3) Personalized learning: Online platforms usually provide a wealth of resources and tools, allowing students to choose the most appropriate learning path based on their learning style and interests. This personalized learning experience helps improve learning efficiency and effectiveness.
- (4) Openness: Online teaching is highly open, and students can access educational resources and knowledge from all over the world [4]. This openness not only broadens students' horizons, but also promotes communication and understanding between different cultures.
- (5) Interactivity: Although online teaching lacks face-to-face communication, effective interaction and communication between teachers and students and between students can still be carried out through various online tools and platforms, such as discussion forums, video conferencing, etc. This interactivity helps enhance the depth and breadth of learning.
- (6) Continuity: Online teaching is not limited by time and location, and students can access course content and learning resources at any time. This continuous learning method helps students maintain the continuity and stability of learning.

3. Based on the teaching experience of European and American MOOCs, online teaching has a profound impact on higher education.

(1) Online teaching has reshaped the classroom teaching paradigm in colleges and universities and the teacher-student relationship in teaching.

The traditional education model is based on the three theories proposed by Herbart in the 19th century: namely, "teacher-centered, teaching material-centered, and classroom-centered". It highlights the teaching status of teachers in learning and manifests itself as passive learning of learners. That is, teachers impart learning materials to students as ready-made conclusive knowledge, while omitting the process of students discovering knowledge independently. The traditional teaching model is based on teachers teaching knowledge and students learning independently. The traditional education model plays an irreplaceable role in cultivating students' understanding, memory, attention, and deductive reasoning abilities. However, it ignores the subjective initiative and independence of students as learning subjects, which is detrimental to cultivating students' ability to actively discover and solve problems, independent thinking and innovation, and their innovative qualities. MOOC teaching in Europe and the United States has changed this teaching model. MOOC teaching uses technical means and is learner-centered, requiring learners to face numerous learning resources online and search and access course-related resources online based on their own needs and interests, and information for positive self-construction. Learners must purposefully search for specific information that can help them solve problems and actively construct new knowledge with the help of past knowledge structures. Online teaching makes students the masters of learning, mobilizes learners' enthusiasm for learning, and promotes the historic transformation of traditional teacher-centered classrooms into efficient classrooms oriented to learner needs in the information age.

(2) Online teaching makes lifelong education and personalized education possible The traditional teaching model is mainly based on teacher lectures [5]. Although teachers also know that they need to conduct hierarchical teaching according to the different actual situations of students, due to the limitations of time and space, teachers cannot meet the individual needs of students. Online teaching is an autonomous teaching model that fully considers the learning wishes and needs of different learners and leaves the learning progress arrangements to the students themselves. Students can decide the length of each study session, the number of repeated studies, and whether to seek help from the teacher based on their own learning foundation, learning interests and learning abilities. It truly realizes teaching students in accordance with their aptitude, conducting hierarchical teaching according to students' specific conditions, and giving students flexible learning opportunities. Due to the open nature of online teaching, it breaks the limitations of learners' time and space and makes lifelong education possible.

(3) Online teaching realizes the internationalization and popularization of higher education

Online teaching uses computer technology to break the objective barriers between regions, eliminate the monopoly of knowledge by universities, and enable educated people to enjoy the educational resources of world-renowned universities without leaving home. For example, MOOCS implemented in Europe and the United States adopts an open attitude to attract learners from different national boundaries, different races, and different educational backgrounds to study together. The MOOCS platform continues to attract the world's outstanding universities and teachers into its teaching team and promotes the cooperation of international teachers in developing courses.

(4) Online teaching is conducive to the realization of educational equity

At this stage, given the level of social and economic development in our country, high-quality educational resources are still a rare commodity in our country. As an entity, a high-quality university has a limited capacity and a limited audience. Moreover, in our country, the college entrance examination [6], as a mainstream educational evaluation method, still plays more of its role in screening and selection. Such educational evaluation methods will definitely eliminate most of the educated people, insulating them from world-class universities and preventing them from enjoying the source of high-quality education throughout their lives. To a certain extent, it deprives the educated people of their fair enjoyment of high-quality educational resources, opportunity. Now, students from European and American countries can use MOOCS to obtain high-quality educational resources from many world-renowned universities and have access to world-class universities and famous professors.

(5) Online teaching is conducive to the optimization and integration of educational resources

Most of the time, traditional university education is a one-man show for teachers. Each teacher imparts knowledge based on his or her own research results and teaching experience. Everyone works more behind closed doors. Although this is conducive to the systematization of knowledge, it also restricts the development of culture. Communicate [7]. Now, in universities in Europe and the United States that implement the MOOC teaching method, each MOOCS is created by a team with a clear division of labor to brainstorm and develop educational resources to a greater extent. MOOCS is a multi-disciplinary networked teaching-the course team allows teachers to go out and work together to achieve the transformation from individual workers to course design-development teams armed with information technology.

4. Research on the current situation of online teaching in my country based on empirical evidence

After a sample survey of more than 20 colleges and universities across the country, we can draw some conclusions about the actual situation of online teaching in colleges and universities in my country, as show in figure 1-3.

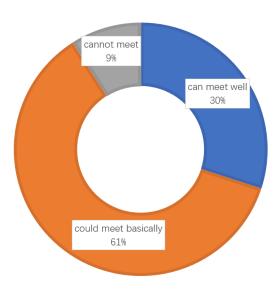


Figure 1. Whether online teaching can meet students' learning needs

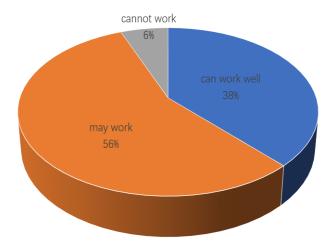


Figure 2. Teachers' attitudes towards online teaching

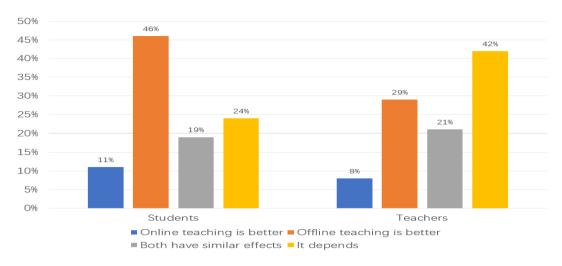


Figure 3. Comparison between online teaching and traditional teaching

5. Based on the teaching experience of European and American MOOCs, online teaching needs to complement traditional teaching with complementary advantages.

Many experts and scholars believe that the "blended learning" model that combines online and offline teaching will be an effective way to integrate MOOCs with traditional classrooms, that is, students first complete the background learning and course tasks of the course content through online learning have the opportunity to discuss and solve the problems encountered in online learning with other students through offline teaching again [8], which not only improves classroom teaching time and utilization efficiency, but also exercises students' independent learning ability and research-based learning ability.

Based on the experience of MOOC teaching in Europe and the United States, we can explore how to combine MOOC teaching with traditional teaching models from the following aspects:

- (1) Course design: In online teaching, teachers can select appropriate MOOC resources as auxiliary teaching materials based on course objectives and student needs. For example, excellent MOOC videos, case studies and other content can be integrated into classroom teaching to improve students' learning interest and participation.
- (2) Teaching methods: Combined with the characteristics of online teaching, teachers can use new teaching methods such as flipped classroom and blended teaching. Allow students to learn independently through online teaching before class, and conduct discussions, practices and question-answering in class to improve students' active learning and problem-solving abilities.
- (3) Assessment and feedback: Using the online testing, homework submission and other functions provided by online teaching, teachers can more conveniently assess and provide feedback on students' learning. At the same time, it combines traditional assessment methods such as examinations and reports to comprehensively understand students' learning status and provide a basis for personalized teaching.
- (4) Resource sharing: There are abundant high-quality teaching resources on the MOOC platform. Teachers can learn from and quote these resources in the course preparation process to improve the quality of teaching. At the same time, teachers can also upload their excellent teaching resources to the MOOC platform and share them with other teachers to form a good teaching ecology.
- (5) Teacher training: MOOC platforms not only provide students with learning resources, but also provide teachers with professional development opportunities. Teachers can learn advanced educational concepts and teaching methods and improve their own educational and teaching abilities by participating in MOOC courses.
- (6) Interdisciplinary cooperation: Online teaching breaks down subject boundaries and provides teachers with opportunities for interdisciplinary cooperation. Teachers can jointly develop MOOC courses with teachers from other disciplines to achieve innovation in teaching content and methods and cultivate comprehensive talents.

We can use online teaching as a supplementary form to the traditional teaching model to help students broaden their horizons through online learning, preview and review relevant knowledge points, and broaden their knowledge; we can use the MOOC platform to actively explore traditional teaching methods based on the premise of improving the quality of teachers' classroom teaching [9]. A reasonable way to integrate classroom and online teaching promotes the improvement of education quality and ultimately promotes the all-round development of the educated.

The combination of online teaching and traditional classrooms needs to be based on sharing high-quality educational resources. Online teaching must become a booster for the balanced allocation of high-quality educational resources and help realize the diversification of teaching methods [10]. It is no longer limited to the only learning space of the classroom, but it breaks the

space limitations of traditional teaching and allows students to learn in real time and learn everywhere.

In summary, we should face up to the advantages of online teaching, use the advantages of online teaching, avoid the problems of online teaching, combine online teaching with traditional teaching models, and ultimately achieve educational internationalization, educational equity, lifelong learning and optimal allocation of educational resources. , and ultimately improve the quality of education and teaching.

References

- [1]B H KHAN. Flexible learning in an open and distributed environment[M]. Flexible Learning in an Information Society, 2006.
- [2]BETTY COLLIS, JEF MOONEN. Flexible learning in a digital world[J]. Open Learning: The Journal of Open, Distance and e-Learning, 2002, 17(3):217–230.
- [3] Jiang Huifeng, Liu Yiping, Zhang Bing. Research on behavioral choices, motivations and countermeasures of college teaching reform under online education [J]. Heilongjiang Higher Education Research, 2021(01):150-155.
- [4] Zhou Kaile, Lu Xinhui, Ding Tao, etc. Problems and countermeasures in large-scale online teaching in universities [J]. Journal of Tianjin Normal University (Social Science Edition), 2020(06):7-11.
- [5] Wu Daguang, Li Wen. Phased characteristics of large-scale online teaching in colleges and universities in my country—an empirical study based on questionnaire surveys of students, teachers, and academic staff [J]. Journal of East China Normal University (Education Science Edition), 2020 (07): 1-30.
- [6] Miao Jingmin, Wang Yu, Wang Qiong. Development trends and enlightenment of European MOOCs [J]. China Distance Education, 2022(5):34-40.
- [7] Wang Tinghuai. MOOCS Massive Open Online Courses sweeping global education [M]. People's Medical Publishing House, 2014.5.
- [8] Yang Hongmin. The inheritance, transcendence and transformation of university education ideas through MOOCS [J]. Educational Development Research, 2014(7).
- [9] Li Guifang. Reflection and construction of university classroom teaching model under the background of MOOCS [D]. Shandong Normal University, 2015.
- [10] Environmental information from Monterrey Institute of Technology and Higher Education Yield New Information about Environment Monitoring (Multivariate water quality analysis of Lake Cajititlan, Mexico) [J]. Energy & Ecology, 2020:1646.