Application Bottlenecks and Countermeasures Analysis of Modern Information Technology in University Teaching-Taking MOOC as an Example

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Abstract: In recent years, MOOC has developed rapidly in the world by virtue of the incomparable advantages of traditional classroom teaching. However, the development of MOOC also encounters many application bottlenecks. The loss of learners is the biggest bottleneck restricting the development of MOOC. In addition to this phenomenon, English teaching environment and difficult credit recognition also make the interest of MOOC student weak. In view of the above problems, this paper puts forward some countermeasures to improve the efficiency of MOOC, which can provide some references for relevant researchers.

1. Introduction

MOOC (Massive Online Open Courses) takes video and corresponding tests as important learning resources, and complements interactive learning activities such as network teacher-student communication [1]. It features streamlined content, reasonable design and equal teacher-student relationship. It is realized by effectively integrating a series of linear learning behaviors such as resources, teachers, paths, environment and students. Now the efficient breakthrough of teaching innovation in time and space is another storm of change brought by the network to education and online education. We need to weaken the traditional structure design appropriately, emphasizing the essential core content of the teaching plan, and subtracting from the complex content of the traditional network course. The original syllabus, key points and difficulties of teaching and the typical problem exercises in chapters of the common standardized courses can retain some elements properly in MOOC teaching link. However, while conforming to the current mainstream classroom teaching process behavior model, we should take into account the innovation of the network platform in the process, so as to realize the all-round penetration of the learning process. The MOOC teaching time is relatively short, which requires the teaching design to highlight the key points, and at the beginning to strongly attract the attention of learners, so that they can generate interest and desire to learn to complete the teaching process. Therefore, MOOC teaching behavior is required to have the characteristics of rich expression and body language, humorous language, adjusting teaching methods and styles according to different teaching contents, ensuring a relaxed atmosphere of teaching and learning in each period of time, enabling learners to fully experience the cultural and academic creativity of the instructional designer, and striving to show the characteristics of the curriculum and the teachers' individual or team independence. Special style and charm. In the MOOC experience, most of the learners register for the purpose of satisfying their interests, improving their working skills and enjoying themselves, while only a part of the MOOC registers for the purpose of obtaining credits or certificates [2].

2. Bottlenecks of MOOC in University Teaching

2.1 Serious Drain Problem.

MOOC mode is different from our traditional teaching mode. It is an online education mode based on Internet. In this mode, we are far away from the control of teachers, from the supervision of classmates, all rely on their own consciousness. It is in this mode that those users who are not
conscious and lack perseverance contribute to today's high dropout rate of MOOC. Indeed, when learning completely becomes an autonomous behavior, when learning is no longer subject to external constraints, the threshold for dropping out is very low, and learning itself does not need to pay. Therefore, in the process of MOOC learning, self-control and willpower are the great masters of dropping out halfway. MOOC offers free or inexpensive university courses to the community, which can be taught in a different way. Those who have enough motivation and perseverance can shape themselves into top-notch talents through cheap or free online courses, but those who do not have enough consciousness must complete their studies through school education. MOOC learners report also shows that 55% of MOOC users do not learn MOOC because of their little perseverance. In modern society, with the steady growth of economy and the rapid progress of science and technology, people have to face and deal with more and more things, and people's life rhythm is also faster and faster. In a day, people always think about how to efficiently use the limited time to complete the corresponding tasks, so idle time is relatively valuable. For Chinese MOOC users, college students and new social workers account for a considerable proportion, so it is not surprising that they regard the limited time they can devote as one of the reasons for the high drop-out rate [3].

2.2 Language Communication Barriers.

The problem of language difficulty is mainly manifested in Chinese MOOC users. It is not a fundamental problem for foreign users in English-speaking countries. Take Coursera in MOOC platform as an example. Therefore, for Chinese users whose English level is not very good, the language problem is really more difficult. After registering in Coursera, it is not difficult to find that most of the courses are taught in English. There are no Chinese subtitles available for Chinese students. It is well known that MOOC can provide courses for people everywhere, which proves that MOOC provides opportunities for everyone, regardless of their learning ability and learning foundation. They will be able to join the platform for learning, and Coursera offers courses in English, which causes great trouble to many students with weak learning ability and poor foreign language foundation. This does not take into account the individual differences of students. Especially for Chinese students with weak English foundation, English only plays the role of score assessment in college entrance examination, in many Western countries. In the southern region, English testing only stays on written tests and papers. Most schools do not attach importance to student’s listening and speaking ability. Therefore, although international MOOC courses can provide students with opportunities and platforms for learning and practicing English, many students also abandon the learning mode of MOOC courses because of language barriers, which is one of the reasons for the serious loss of students mentioned above [4].

2.3 Difficulty Credit Accreditation.

From social learning resources to formal learning resources in school, MOOC will change from resources that satisfy individual spontaneous learning to resources that satisfy individual self-conscious learning. Therefore, the learning results of MOOC will face the problem of assessment, which puts the credit recognition of MOOC learning on the agenda. However, the credit differentiation of MOOC courses depends on at least two factors. First, whether the MOOC curriculum has reached the quality required for credit award. Secondly, how to assess whether the students have completed the above courses through a reliable way. That is to say, it needs at least two steps to realize the academic differentiation of MOOC, which needs to coordinate the relevant stakeholders, and cannot be solved by administrative orders alone. Obviously, the spontaneous coordination between schools cannot solve the problem of credit recognition comprehensively. Only when the national education administration department comes out, can we realize credit recognition from the surface, and truly give MOOC elective credits practical significance. MOOC is a new attempt in teaching mode, but this attempt has three limitations at the beginning. In the previous classroom teaching, students expressed their opinions in three-dimensional space in language, and they could interact with each other through language, action and so on. In MOOC teaching mode, written communication largely replaces oral language communication, which greatly reduces the
efficiency of direct experience transmission. MOOC teaching mode attaches great importance to the imparting of knowledge, but neglects the cultivation of student’s other abilities. It is difficult to guarantee students' all-round development. MOOC teaching mode alienates the educational function, which greatly weakens the individual socialization function of the traditional education mode, and its consequence is that the individual sociality is neglected. These are the concrete manifestations of MOOC’s limitations in personnel training.

3. Countermeasures of MOOC in University Teaching

3.1 Enhance Course Attraction.

Course attraction can be achieved through production. The student’s final scores are proportional to the number of times they watch videos, do experiments, hand in homework and read forums. They also found that some homework had become an important reason for many students to stop. Therefore, the active promotion of MOOC learning process can be achieved by grasping the best opportunity of MOOC course publicity to obtain better quality students, providing help to students in the process of problem solving, introducing the medal system commonly used in the game in the forum and other methods. Due to the flexibility and randomness of MOOC course selection, and the low cost, the proportion of dropouts is higher. If the dropout rate of registered students in MOOC courses on this platform reaches a certain proportion, then some restrictions can be set on the course selection conditions, so as to avoid dropping out at will. MOOC providers can require students to pay for identity authentication when they attend the course. Video time is less than 6 minutes. Teacher’s enthusiasm and passion. Teachers' head portraits are embedded in the video. Students are given a one-to-one feeling and the application of handwritten pens. Each school has its own characteristic subjects. Universities must give full play to their own characteristics and do a good job of characteristic resources, which can not only expand their influence, but also enable their teachers to display their talents. If colleges and universities feel that they are useless in the wave of MOOC, they will certainly respond negatively. Only by making each university display its own characteristics and expertise, can it stimulate the enthusiasm of the University for MOOC, not only enrich the curriculum resources of our country, but also produce courses to meet the needs of learners, and realize the sharing of resources. Teachers should also actively participate in the practice of open curriculum teaching, explore the combination of MOOC and traditional classroom, constantly improve teaching methods, and enhance their teaching, scientific research and social service capabilities.

3.2 Improve Language Environment.

As most of the MOOC courses are English courses, many learners, especially Chinese learners, have little knowledge of the course content because of their weak English foundation. Therefore, MOOC courses in China can try to cooperate with other platforms to produce Chinese subtitles in English-speaking courses for Chinese learners to understand and learn. Besides English courses, China can independently develop traditional culture courses with Chinese characteristics, with English subtitles. First, it can promote Chinese special courses and expand the global influence of traditional Chinese culture education. Second, it can exercise learner’s English level and enhance their understanding of the curriculum. In view of the network limitations of MOOC, although MOOC can affect learners all over the world, it has the advantages of distance education and cannot touch the professors of practical courses. It can try to combine MOOC with traditional classroom, that is to say, it can combine online learning mode in MOOC with traditional classroom learning mode. Firstly, the learners in MOOC are classified by region. When a course is finished, the learners in the same region are classified according to their interest in the different questions raised by the course. Students can use these materials and information to find local MOOC learners with the same interest, such as physical education, which is a practical course. They can publish tasks in the MOOC platform. The learners can use these materials and information to find local MOOC learners with the same interest. Find out other local like-minded learners according to the sports of interest, and complete the task in groups. The state has proposed incentive policies to reduce the cost of online course recording and
increase the number of free courses. Nowadays, more and more profit-making online course institutions have emerged as the times require. They have cooperated with various colleges and universities to record and admire courses for their teachers. Some of the recorded courses are used in schools. Students choose the credits of this course or use them in other colleges and universities. These courses are generally free of charge.

3.3 Support Credit Mutual-Recognition.

With the growing maturity of network communication technology and the global promotion of large-scale online courses, the teaching organization of courses is breaking through the traditional single school teaching mode, establishing a curriculum contract framework, and forming a new generation of cross-school and cross-regional curriculum community. The alliance will integrate high-quality inter-school teaching resources, form a sharing mechanism of high-quality courses, enrich teaching and learning methods, promote the balanced development of higher education, enhance the level of talent cultivation in different levels of institutions of higher learning and serve the society. Through the alliance mechanism, it will integrate the advantages of members, select excellent teachers, build large-scale open online courses, and provide students and social learners in the alliance colleges and universities. Choice and service of course learning. Promote credit recognition and credit management system innovation of online open courses. Colleges and universities are encouraged to formulate standards for determining the quality of online open course teaching, incorporate online courses identified by the school into training programs and teaching plans, and formulate methods for evaluating the teaching effectiveness of online courses and for determining credits for students to study online courses. On the premise of guaranteeing the quality of teaching, colleges and universities are encouraged to carry out online learning, combining online learning with classroom teaching and other ways of credit identification, credit conversion and learning process identification. How to ensure the quality of credit recognition and take appropriate measures to guarantee the examination link has also become a problem worth exploring. California tries to make universities recognize MOOC course credits through legislation, but most universities believe that the supervision mechanism of online education cannot guarantee the quality of credit. In order to get credits for real MOOC learners, some courses have participated in the pilot credit system. Some colleges and universities adopt the mixed mode of online learning and online teaching and examination to carry out flipped classroom teaching, which effectively ensures the quality of credit certification.

4. Conclusion

In the era of globalization and informatization, MOOC, as a new teaching form, will lead higher education to a new era. MOOC is not a replica of traditional classroom. Interaction and instant feedback are its important characteristics. We must enhance the attractiveness of courses, improve the language environment, and support credit recognition. We can use modern social media to help learners persist in learning, improve the completion rate and learning effect.

References