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Research of Computer Basic Course on The Blended Learning Model Based on MOOC

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Abstract: With the continuous development of higher education informatization, people gradually realize that both the traditional classroom teaching and the network learning has its own advantages and disadvantages. Therefore, it is necessary to promote the hybrid learning which is complementary to each other. The rise of MOOC provides new ideas and methods for the development of blended learning. From the perspective of pedagogy, the author analyzes the curriculum model of MOOC, designs a blended learning model based on MOOC, and applies it in the teaching practice of computer basic course.

Keywords: MOOC hybrid teaching model computer basic course

1. Introduction

With the rapid development of information technology in higher education, college teaching methods and means, students' learning styles have undergone tremendous changes. The network learning, which focuses on students and pays close attention to students' independent participation, has been developing vigorously in the field of education and teaching. [1]This kind of teaching mode beyond the limitation of time and space has brought unprecedented impact to the traditional teaching of "classroom, teaching materials and teachers". However, the network learning is not conducive to the students to grasp the knowledge, is not conducive to the cultivation of students' emotional attitude values; the traditional classroom teaching can't properly reflect the dominant position of students, mobilize the enthusiasm of the students. How to deal with the challenges brought by network learning, how to solve the existing problems of traditional education, and how to reform the existing teaching models and methods, will be a major issue in the field of education and teaching in the future[2].

The effective development of blended learning can't do without the support of the excellent network teaching platform and the perfect network curriculum model. In the past two years, a large-scale online course, MOOC, has been paid more and more attention and has become a hot topic in the field of education and teaching. In this paper, the basic course of computer is taken as an example to design a hybrid teaching model based on MOOC.

2. MOOC teaching model

MOOC full name Massive Online Course, namely large-scale online open courses.[3] Wikipedia defines MOOC as a large-scale, open, for the general population through online learning courses . Jiao Jianli, Professor of South China Normal University, the first "MOOC" translated as "Mu class", and has been widely recognized by the domestic educational circles .

The Mu class emphasizes student-centered, the learning process is student-centered, to mobilize students' interest, let the students in inquiry learning autonomy, from teachers to students' standard transformation, the real implementation of the dominant position of students.

The Mu class teaching advantages are mainly embodied in the following aspects: first, for the course of the traditional dapper, 45 minute lesson is divided into 10-15 minutes consisting of micro course, each course

according to the knowledge of organic together, to facilitate students learning debris, to stimulate and maintain students' online learning the interest in reducing the burden of the students, which is consistent with the cognitive law of students; second, the Mu class vivid content, a large number of knowledge points in the course of the animation to show the vivid explanation and teachers, a series of tests into the curriculum, these questions have great interest, students must answer correctly to continue after the lecture, the let the students to concentrate, exploration and curiosity driven continued their learning[4]; third, Mu class platform powerful, highly interactive. Set the course platform unit test and achievement of mutual evaluation links, homework evaluation, students interaction between students and teachers, to fully grasp the learning effect of students through the platform, to supervise the learning process of students, answering questions at any time on the students' problems is the bridge of communication and exchange between teachers and students.

Mu class for the students to create the conditions for autonomous learning, it focuses on students' active participation and self experience. We can take advantage of this class for students in the Mu class teaching platform to watch the video, learning teaching documents, finished in the unit test, submit assignments, homework, in the course of mutual discussion, of course put forward problems and a series of methods to complete the study, finally through the assessment of teachers to strengthen supervision students.

3. based on MOOC hybrid mode design

3.1 limitations of MOOC Teaching

Although the emphasis is on the students as the main body, but can’t ignore the dominant position of teachers. Although the influence of mu of traditional education obvious, can change the traditional teaching mode, but can’t completely replace the traditional teaching mode. The reasons are as follows: first, the Mu class is a virtual network of online classroom, lack of flexibility, it is easy for students to become a vassal of network teaching, cannot replace face-to-face interaction between teachers and students; second, "computer foundation" is a theoretical and practical operation course, for operation ability students can’t complete the final operation, must get the teacher's guidance and help in the classroom; third, to discuss the Mu class network teaching is blind, and the lack of pertinence, discussion classes should be in the classroom by teachers to organize and guide the lack of[5].

Therefore, if not combined with the actual classroom, Mu class is not the best teaching model. It is an ideal teaching mode in the teaching reform of colleges and universities to combine the online teaching and the classroom teaching. Mixed teaching seminars + operation + after answering questions online in performance, namely online network teaching and traditional face-to-face teaching the advantages of both, the Mu class network powerful platform, to build a massive online video teaching for students' autonomous learning; on the other hand, face-to-face classroom interaction and large scale discussion through the real classroom, the comprehensive ability of the students; after-school teachers observe students' learning effect, and promptly answering questions for students.

3.2 hybrid teaching model framework

According to the principle of "constructing hybrid teaching basic computer courses", according to the course of hybrid teaching goal, try MOOC and traditional classroom teaching of "computer foundation" combines the advantages of each other, complementary advantages, to build a framework for MOOC's "computer basis" course teaching mode based on the hybrid. The teaching mode is composed of three platforms: MOOC online course platform, offline classroom teaching platform and teaching service platform.

MOOC online course platform for students to learn the "computer foundation" courses to provide appropriate

guidance resources, learning resources and training resources. Through the MOOC online course platform of learning, students are required to watch video courses, independently completed the course in the video of the embedded test and after test, and participate in the course forum online discussion, until fully grasp the "computer basis" course into the basic knowledge and basic principle, to complete the "computer based" learning theory knowledge.

As an important supplement to the MOOC online course platform, the online classroom teaching platform takes on the important task of strengthening the teaching content of the "computer foundation", combing the system, expanding and deepening, exploring and innovating. In the classroom teaching activities, teachers no longer serve as the knowledge of the task, but go to the students answering questions for students, classroom discussions, keynote speeches, panel debates, role-playing teaching activities, help students to complete the "computer based" theory of internalized knowledge and enhance the comprehensive quality.

The teaching service platform "to provide relevant information resources and information service of computer based" hybrid teaching, including the improvement of online learning support service system innovation service system, library and data analysis based on the learning support system, not only to provide personalized learning support for students, improve students' learning experience, but also provide rich the teaching resources for teachers, but also for education administrators to provide the students with a summary of the data, in order to develop a more scientific and reasonable "computer basis" course teaching plan.

3.3 the implementation of mixed teaching mode

Hybrid Teaching Model in "computer basis" course in the specific application process is as follows: (1) online teaching: students use their spare time to log Mu class platform of teacher learning video teaching well, make a mark on the video appears in the key and difficult part and practice part, the embedded in the video can follow the steps. Operation, and record the operation process, can try to complete the video in the teachers' questions and classroom tests. (2) class discussion: operation record students submit to the teacher before class learning video, record teacher finishing students, analyzes the key and difficult points, and according to the students' learning and operation issues targeted on; in breaking the key points and related operational issues, the teacher assigned task the new guide students practice; teachers to meet students' practice questions to guide students to discuss and study, summarize and evaluate the results according to the discussion. In the discussion of the students, teachers should always guide and manage, can't be allowed to leave the classroom. (3) class FAQ: students entering the Mu class platform to complete their homework and quiz questions, communicate with each other on the platform, teachers should observe students learning and work as a whole complete effect to student questions to answer in time.

4. Analysis of the effect of 4 mixed teaching model

The research of blended learning and application of MOOC based on the end, the author through the form of questionnaire for all participating blended learning students were investigated, in order to understand the satisfaction degree, students of blended learning MOOC courses for students learning is helpful, the influence factors of blended learning in the learning process and a series of problems. Through the statistical analysis of the relevant data, this paper analyzes the effect of the blended learning, and draws the corresponding conclusions, so as to provide reference for the college teachers to carry out the MOOC based blended learning. The results of the questionnaire survey are shown in table 1.

Table 1 hybrid learning effect analysis table

Questionnaire topic	Questionnaire analysis
Acceptance of learning styles	85% of the students were able to accept it; and about 12% of the students said it didn't matter; only about 3% of the students could not accept it. This shows that the vast majority of students can accept mixed learning.
Hybrid learning can better promote knowledge learning	60% of the students think it is very good, and the students think it is good; 8% of the students think of the general; and the other 1% of the students think it is not good. This shows that the majority of students believe that blended learning can better promote knowledge learning.
Satisfaction with MOOC platform	82% of the students on the MOOC platform is very satisfied with the satisfaction of the students of 10%; 5% of the students think in general; 3% of the students said they are not satisfied. This shows that the vast majority of students are satisfied with the MOOC platform.
The satisfaction degree of Blended Learning	76% of the students are very satisfied with the blended learning style; the students are generally satisfied with the 21%, and the students are not satisfied with the 3%. This shows that most students agree that blended learning.
MOOC course for learning help	82% of the students said it was very helpful, and about 11% of the students said it was helpful, while 7% said they didn't help. This shows that the vast majority of MOOC courses are of great help to students' autonomous learning and collaborative learning.
The influence of blended learning on Students	43% of the students think that expand their knowledge boundary; 27% of the students think that their learning ability has been improved; 24% of the students think to improve their ability to analyze and solve problems; 6% of the students choose the other.

According to the above results, it can be seen that the blended learning based on MOOC can promote the students' learning, and it can also arouse the students' learning enthusiasm. Most of the students are satisfied with the learning model. But there are still some students due to the impact of the Internet is not convenient, not skilled in computer operation and other factors, so that they in the blended learning encountered some obstacles, which requires teachers to provide appropriate help and guidance. Based on MOOC, the multiple evaluation method and timely and effective feedback provided by the blended learning model can help teachers to understand the learning situation of students in time and adjust the teaching in time.

5. Concluding Remarks

Basic computer teaching mode has seriously affected the teaching effect and cultivate students' innovative thinking, and the development of "Mu" in accordance with the rules of the development of modern education, although there are still some problems and shortcomings, but the "Mu" concept decides that it must

have broad application prospects in College teaching. As teachers, we need to adapt to this change, from the "Mu" mode of open, personalized, independent and creative education idea, weaknesses, and actively explore, reform and innovation of the existing teaching mode, and create a new mode of teaching practice with the professional characteristics.

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