

The advantages and disadvantages of the teaching method of "MOOC" in the course of university

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Abstract: Network and the popularity of wireless terminal equipment, makes the university computer foundation course is great challenge, this paper analyzes the lesson "desire" as a supplementary means, apply to the pros and cons of computer basis teaching, actively explore the classroom teaching and lesson "desire" network teaching with the combination of teaching methods.

Keywords: University computer foundation; MOOC. Inverted classroom teaching

1. Introduction

Computer Basic Teaching is a common required course for any freshman (without computer science speciality) in university. In order to train these students' information technology literacy, improve the computer application level, and computer problem solving ability. There is some problem in this course, such as more students, and less teachers. In Yangtze university, every year, nearly 8,000 students enter this university, but only more than twenty teachers, the ratio of teacher to student is 1:350. The work load of teaching is heavy, so the input and teaching experience of teaching is uneven. In additional, because of the base of student's computer skills is very different, same teaching course cannot satisfy every student's need. As development of network course, Mooc, Micro lecture and so on, make chance for the reform of computer basic teaching.

2. University computer basis MOOC course construction

University computer basis mainly introduce basic theoretical knowledge and common tool software. Firstly, MOOC^[1] course construction divide teaching knowledge into 11 chapters: Fundament of Computer System, Windows7 operation system, Word processor software word2010, Electronic tabulator treatment software excel2010, Power pointer 2010, Computer network and internet application, Database, Data structure, Multimedia technology and dozens of video. Each knowledge of video length range from 4 to 15 minutes, to facilitate students' use of fragmented time to study, at the same time each knowledge point is a relatively independent knowledge introduction, students can choose according to their own basic computer have personalized learning. The division of knowledge points also facilitates the update of MOOC courses, which can be specific to the teaching improvement or content update of a particular knowledge point.

This course is made in the form of: ①the teacher gives a picture of the teacher, the teacher goes to the studio to record the video, and then the producer tries to integrate the teacher's explanation and knowledge points. ②A handwritten explanation, such as the representation of binary Numbers and the relevant knowledge points of the operation, the master teacher demonstrates the calculation process through the hand sketching. ③The real operation screen, such as office software and multimedia technology and other operable knowledge points, the teacher demonstrates the operation method of the relevant software, recording the screen completion; ④The animation demonstration, for some more difficult to understand the knowledge point to make animation,

for example, the network structure is demonstrated by the animation, make the content image vivid, the student is easy to understand.

3. The implementation of university computer basic MOOC teaching

MOOC teaching in university computer basis implementation uses the MOOC based on classroom teaching and learning model, students participate in the pilot implementation of a total of 1000 students, including more than 700 science students and liberal arts students more than 300 people. In the pilot implementation of MOOC teaching, the teaching arrangement and course assessment mode are adjusted accordingly and the teaching cases of flipped classroom are designed.

The experiment USES MOOC teaching, flipped classroom and experiment to combine teaching methods. Among them: ① MOOC teaching 12 weeks. Weekly, about 60 minutes of video learning tasks each week, students watch video on their own, complete online quizzes and participate in BBS discussion. ② When the flipped classroom is 8 hours, the flipped classroom does not repeat the contents of video, which is mainly divided into group discussion, knowledge application and expansion. ③ During the experiment, the students conducted practical exercises.

Adjust the inspection way: the course of the original assessment by the final examination, experiment, attendance and performance of three parts, including the final exam by computer exam worth 50% of the experiment worth 40% of the attendance and performance at ordinary times accounted for 10% of total grade. In addition, only the final exam, the experiment, the attendance and the normal performance of the three parts will be passed, the course will finally be considered as qualified. After adjusting the mode of assessment, moocs will be assessed by the final exam, experiment and MOOC. The final exam still takes the upper machine exam, accounting for 40% of the total grade, the experiment accounts for 20% of the total grade, and the MOOC study accounts for 40% of the total grade. Only the final exam, the experiment and the MOOC will be passed in 3 parts, which will eventually be considered qualified.

4. The inverted classroom teaching

The first time the concept of inverted classroom^[2] was formally proposed was three teachers from the university of Miami in the United States. In 1996, in the introductory economics course, Maureen J. Lage and others have used the world wide web, multimedia computer and other equipment to realize the students' self-study course before class, the teacher's questions in class, the study of organizational experiment and the inverse study of the question. They use this new teaching mode, to help students choose their suitable style for active learning, and make the students on the premise of do not take up class time to finish a lot of team cooperation projects.

Select the key points and difficult points of the course, the flipped classroom teaching is centered around the understanding of the teaching [4], and the teaching chapters include the presentation and transportation of data computing and computer networks. Before class, students are asked to complete the tasks assigned by their teachers, including video and online quizzes, to collect the problems in their learning process. In class, the teacher review overview the content of the teaching, aiming at the key knowledge questions, students' number from 4 to 6 in one group discussion, the teacher guides the student to integrate theory with practice, apply their knowledge to solve practical problems, develop thinking ability.

5. The advantages and disadvantages of MOOC teaching

The biggest characteristic of MOOC is that it is extremely open and can be shared by information resources on the Internet. This method of teaching, through some brief video to transfer knowledge, is concise, so that students can make full use of their leisure time to study. In the video play, there will be some on-going exercises, and the students will continue to play only the answers to video. This kind of game teaching can attract students' attention and improve their interest in learning. Under video, there will be a discussion zone where students can discuss the teaching contents of video and enhance the interaction between students. In addition, there is a special discussion section for each section. Students are not only free to discuss, but also can ask teachers for advice, teachers and students, and students to achieve barrier-free communication. MOOC provides students with more learning methods to meet the needs of different students.

The disadvantages of MOOC: (1) Students need to be able to learn independently. Longed for course teaching for students more ways of learning resources and learning, students can freely allocate time, increase the utility, can also help students' divergent thinking, is a good tool for learning. But this method of learning requires students to have a strong self-control and learning initiative, because online course requires students to registration, course selection, arrangement study time, which requires students to have a strong thirst for knowledge and the self-control to complete, only students' autonomous learning ability is strong enough to benefit from it. If students don't have a strong sense of learning, even learning resources is a waste. (2) Incomplete curriculum system. The setting of online online courses needs to be strictly designed, which should be properly connected between courses, so that students have a systematic knowledge framework. But the moocs are deficient in this aspect. Since the courses are mainly short video and the knowledge capacity is small, many knowledge points are omitted. When students are watching video, they will find that there is a lack of coherence and correlation between different courses, so what should students do before class and how to choose them online. The curriculum is the biggest problem facing students. (3) Insufficient emotional information. School is not only a place to spread knowledge, but also to cultivate emotions. Campus is the place where the students learning and life, teachers on students' personality, interpersonal skills and team cooperation ability and so on the formation of the influence, which is longed for lacking of class teaching. Because the student learning through the network video, so students are independent of each other between learning and life, in spite of the platform you can discuss with students from around the world, but through the screen, do not know each other, communication is limited to study scope, lack of emotional communication. Communicating in a virtual space will keep students away from the real world, which is not conducive to cultivating students' interpersonal skills.

6. An innovative exploration of the basic teaching method of computer application in MOOC.

Inverse the role of the teacher. The role of the teacher is the guidance and guidance from the main executor of the mission to the student learning. Based on the moocs teaching mode, the computer basic teaching classroom gradually realizes informatization and focuses on practical teaching. In addition, it is also important to share teaching resources on moocs so that students can learn at anytime and anywhere. The teacher understands the students' learning situation in the mooc platform, grasps the students' learning habits and characteristics, stimulates the students' potential, and guides the students to gradually improve their autonomous learning ability. In this process, the role of textbooks will be gradually replaced by instructional teaching of teachers. Need to stress is that teachers should give full play to the role of the supervisor, real-time tracking of online learning, urge the students to complete the online learning tasks, in order to change the traditional teaching classroom cramming education, let teachers become the student to study guides.

Inverse the role of the student. In the traditional teaching system, students are only the recipients of

knowledge and the completion of homework, but in the period of moocs, students will become the dominant students in classroom teaching. With developed information technology, students can adjust their learning plans according to their own learning progress, and choose their own learning time and place of study. In class, students can speak freely, ask questions to their teachers, or interact with their classmates. Whether they are in class or outside of class, they can fully mobilize students' enthusiasm and improve their learning efficiency. On the mooc platform, students can choose the courses they need according to their learning objectives and learning ability. During the course opening period, you can watch video, complete the online task, interact with students from BBS, and participate in other extracurricular tests. Completing the learning process specified by the mooc platform can also get certificates and credits, which are also a kind of encouragement for students. For class teaching is extending in the field of information technology in teaching, teaching evaluation and teaching quality evaluation provides a reliable basis, students to vote through the network to evaluate the teaching quality is more just. Online classes make the school's computer teaching content more abundant, and the teaching quality assessment becomes more real. Student learning has broken through space and gradually to the world.

7. Conclusion

Through MOOC of fundamentals of computer teaching practice, using MOOC and Inverted classroom teaching mode of combining the teaching effect is good, the students' acceptance of online teaching mode is higher, can complete online learning. But MOOC teaching also exists some problems, such as school does not allow a freshman dorms open network, bring great inconvenience for online learning, MOOC platform, such as incomplete function, the problem of the system; In addition, some students are not used to moocs learning methods, and the course production needs to be constantly improved to make the content more vivid and vivid.

Reference

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