The Teaching Implementation of Computer Basis under the Background of MOOC

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Abstract. With the coming of MOOC storm, the education sector is mixed. MOOC as a new teaching mode is staging a show in the world. This paper through analyzing the advantages and disadvantages of the MOOC, expounded the MOOC's influence on the theory and practical teaching of computer basic course, and also discussed how to apply the characteristics of MOOC to promote the teaching implementation of computer basic course on the aspect of teaching method reform, study method reform and so on.

What is massive open online course

Massive open online course is short for "MOOC", also "MOOCs". It is a newly emerged online course development model, and it originated from the old course development model which combined the old publishing resources, learning management system and learning management system together with more open network resources. "MOOC" in general is a large-scale network open course, in order to enhance the dissemination of knowledge, is issued by individual organizations with sharing and collaboration spirit, and spread on the Internet. Just as its name implies, "M" on behalf of Massive, is different with the traditional course only have dozens or hundreds students, a course of MOOCs has many thousands of people, up to 160000 people; the second letter "O" on behalf of Open, guided by interest, who want to learn all can come in, regardless of nationality, just a mailbox, can be registered to participate in; the third letter "O" on behalf of online, you complete the learning all online, don’t need to travel, is not limited by time and space; the four letters "C" on behalf of course, that is the meaning of course.

The advantage and disadvantage of MOOC

(1) The advantage of MOOC

From the point of the course form, MOOC mainly is composed of a classroom speech micro video by 8 to 15 minutes, puts the course knowledge points into fragmentation, students through watching video online to learn the course knowledge. In the learning process, if you encountered some points are difficult to understand, you can through the learning group or online forums to interact and answer. Therefore, under MOOC mode, the student's study place has been changed from the traditional classroom into anywhere has network, the teacher's main function is no longer face to face to impart facts and theories, but transformed into a knowledge guide, students have changed from passive learning and accepting knowledge into taking the initiative to acquire knowledge.

From the point of course content, every micro video of MOOC is a knowledge subject, and equipped with synchronous practice and test, students can freely distribute the learning time of each knowledge point according to their own professional knowledge, so students' learning is more flexible and convenient.

From the point of course resources, the online open courses of MOOC originated from the top universities at home and abroad, higher quality education resources around the world, it will achieve global sharing. The openness and publicity of MOOC will promote the improvement and increasement of the teaching resources quality, and promote schools, teachers and courses around
the world to "compete".

From the point of learning objects, the learners in same course of MOOC will not restricted by learners’ number, education, foundation, age and so on, they can according to their own needs and preferences to choose the interested course for the autonomous learning, which fundamentally broke the phenomenon of studying hard, expanded the scope of subject teaching.

(2) The disadvantages of MOOC

From the point of students, the disadvantages of MOOC includ three points: first, the openness and global of MOOC put forward higher requirements to the English proficiency of students. The teaching resources of MOOC are shared globally, a number of high-quality teaching resources are made by a universal language-English, and not all people’s English translation speed and accuracy can reach a higher level, even if is bilingual subtitles of Chinese and English, learners may also can’t learn smoothly. Therefore, how to improve students' English level in large scale and big range is one of the main obstacles of MOOC promotion. Second, the richness and compactness of MOOC resources require students to have a high subjectivity and self-consciousness. MOOC is different from classroom teaching, classroom teaching is gradually in-depth knowledge learning under the guidance of teachers, but MOOC’s learning is based on spontaneous, so it need strong consciousness to the successful completion of the course learning, otherwise, there will be a high registration rate but low pass rate. Third, the MOOC is conducted online, nowadays network resource is miscellaneous, which requires students to have enough willpower to focus attention to the course learning, consciousness of "shielding" off "grey culture" in the network, otherwise it may result from an inability to understand the course content, unable to complete the course learning, instead of network addiction tragic situation.

From the point of teachers, based on the talent training and teaching mode of MOOC will allow only a small number of top teachers have the opportunity to stand on the platform to teach course knowledge, and most of the teachers’ function of "proselytizing instructs and dispeling doubt" will be lost in a certain extent.

From the point of personnel training quality, based on high-quality educational resources of MOOC, the number of people receiving quality of higher education will be greatly increased. Therefore, the theory on talent training quality will be greatly improved, but when all learners are learning through the same route and mode, how to identify top-notch talents? It is well known that face-to-face classroom teaching is direct communication between people, teachers can judge the accept ability and cognitive level of students to understand them, to teach students in accordance with their aptitude, and to cultivate top-notch talents with outstanding personality. Therefore, MOOC in the cultivation of talents is not good.

From the point of the social recognition, MOOC teaching has the credit authentication system, when the learners meet the courses learning requirements, school will issue the certificate to learners, but MOOC teaching is based internet teaching, and learners’ all the learning process are completed online,so how to ensure the learners’ learning integrity?

From the point of the practice teaching, for the engineering majors, many courses require students to do experiments, then how to achieve this module? If combine the MOOC and classroom teaching, then how to control all students' MOOC learning progress basically consistent under the respection the students' learning freedom? If we practicing teaching use the form that students finish the experiment after class, and show results in class, so how to solve all kinds of practical problems encountered in practical study?

From the point of "educating adults", MOOC teaching more is to impart professional knowledge, then how to cultivate the basic social and living common sense, as well as people face to face communication skills? Without the influence of the school atmosphere and the humanities environment, without the direct exchange and learning between the students, without the influence of the teacher's subtle "model", can students achieve all-round development?
The implement of MOOC in the computer basis teaching

(1) Scientificly and reasonably plan and realize the sharing of resources

In the construction and development of MOOC, the content of the course needs to cover the main subjects of computer science, and try not to repeat the course resources. So, it more needed colleges and universities strengthen the mutual cooperation, scientifically and reasonably plan, so as to ensure normal operation of the coordination mechanism. Actively establish and improve the curriculum declaration, examination and approval, and evaluation system, and constantly enrich the computer course learning resources on the learning platform, effectively improve the quality of curriculum resources. According to the mutual cooperation among colleges and universities, to achieve the sharing of video teaching, to make the curriculum resource is more abundant, in order to better solve the problems that some universities teaching resources are not adequate, can also provide better online learning conditions for college students. At the same time, we can use the way of credits mutual recognition, effectively reduce the repetition probability of students’ online learning resources, to make students more love MOOC learning.

The learning resources of MOOC is enriching, at the same time, the number of students online learning is also increasing, the number of college teachers’ teaching is declining. So, we can put more effort in the construction of MOOC course. Because the number of learners of MOOC course rapidly increased, the pressure of online assistant is increasing on learning platform, the number of online assistant teachers must be increased. Therefore, some teachers should take part in online teaching assistant job on the learning platform, as for some courses not for online learning courses, it need other teachers to teach in the laboratory. After teachers in Colleges and universities had a clear division of labor, using the inter-school cooperation way, to realize the sharing of network resources and teacher resources, and better promote the development of MOOC teaching for the computer basic course.

(2) Carry out the learning mechanism combine online and offline

Actively carry out the teaching and evaluation mechanism to combine online and offline. First of all, through the online learning can make the burden of teachers in colleges and universities to be effectively reduced, is conducive to the overall curriculum efficiency. In the actual curriculum planning, teachers need to integrate online learning into the normal teaching of computer courses, and analyzed it detailly, to develop an online learning plan, to ensure that the online learning time is abundant. In addition, focus on teaching methods can make up online learning better. Aiming at the present situation of college computer basis teaching, to analyze the superiority of the MOOC model than the traditional teaching mode, and analyze the problems of single MOOC class mode in the undergraduate education, to put forward the integration of complementary type teaching mode, and analyze the transformation of basic computer teaching process in this mode.

a. Teacher: based on the mixed teaching mode of MOOC, put forward higher requirements on the professional level of teachers. First is the application of software, teachers need to have strong application skills on the professional software, can master and apply some software, such as video processing, audio processing, image processing software and so on; the second is time requirements, teachers need to pay a lot of time in the production of teaching resources, and also need to spend a lot of time to maintain and improve in the use process; in addition, teachers also need to meet the needs of teaching, collect and collate relevant resources, this teaching requires teachers to pay a lot of time, at the same time, to participate in the relevant technical training, to improve business ability.

b. Students: "computer basis" as a public course, the initiative of individual students learning is not high. How to improve students' enthusiasm for learning is a question that teachers need to think about. First is to improve teaching fun to attract students to learn; second is to join the learning time statistics in the web page, count student’s network learning time, as a part of the teaching assessment.

c. Other: the implementation of mixed teaching mode depends on the construction and maintenance of the network teaching platform, so it needs college put in more human and material resources to manage it. Especially the improvement of teaching resources is not a teacher can make
a good teaching work go it alone, it requires a teaching team participation in the long term.

**Conclusion**

The mixed teaching of information resources is helpful to improve students' ability of independent inquiry learning and improve teaching quality. Teachers need to seriously study the influence and challenge of current education which MOOC brought, and think about how to apply MOOC to combine their own teaching in the teaching implementation, fully mobilize students' enthusiasm and creativity, to promote the improvement of teaching quality.

MOOC brought a change in education, also bred and spawned the new normal of university talents training and teaching mode, facing the opportunities and challenges in the MOOC era, we need to see the form rationally and dialectically, thorough analysis the advantage and deficiency which based on talents training model and teaching model of MOOC, on the basis of strengthening the study and practicing the socialist core values, effectively combined the Chinese teaching characteristics and global MOOC era, to explore a education reform and needle policy which not only conform to the teaching situation in China, but also connect the new situation education with Chinese characteristics.

**Reference**


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