

## **Analysis on Application Bottleneck and Its Countermeasure of Modern Information Technology of College Teaching——A Case Study of MOOC**

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**Abstract:** This paper analyzes the current situation and problems of information technology application in colleges and universities, combines the current situation of information resources in colleges and universities, and proposes a new teaching aid platform based on the relevant theories and techniques of constructing network teaching platform, aiming at the rapid development of information technology. It can be fully applied in college teaching, to effectively improve the quality, and provide reference materials for the modernization of college teaching.

### **1. Introduction**

Modern information technology is to realize the theory and practice of teaching optimization through the design, development, utilization, evaluation and management of teaching and learning processes and teaching resources. It is to optimize the teaching process, teaching resources, teaching effects and teaching benefits. The goal is to achieve the goal of digital learning for students. Mainly include: analog audio and video technology, digital audio and video technology, satellite radio and television technology, computer multimedia technology, artificial intelligence technology, Internet communication technology, virtual reality simulation technology. The information technology involved in this research mainly refers to audio-visual technology, computer multimedia technology and Internet technology. More and more applications of modern information technology in colleges and universities, the mediation of teaching content has added a little active atmosphere to the classroom, bringing a lot of convenience to teaching, but also raised many questions for teachers: it can really improve teaching Quality? However, more and more students do not like to learn. As a teacher, it is necessary to have a comprehensive understanding of the problems existing in the teaching of information technology, and to re-recognize and update concepts to ensure that modern information technology plays the most in teaching. Utility, improve teaching quality and effectiveness.

### **2. The status of applying modern information technology in college teaching**

Many teachers copy the teaching content into the slides before class. The purpose of using modern information technology is extremely simple. It can reduce the number of books in the classroom, save time and teach more teaching content. Many teachers have a superficial understanding of the application of modern information technology in teaching. The integration of information technology and curriculum mostly stays in the closed information-based information integration stage. Information technology is mainly used as a demonstration tool for students. Accepting knowledge is mainly instilled. The advantages of information technology as an open resource environment and the instrumentality, interactivity and intelligence that are easy to collect, process and process to generate information are not well explored. Information technology and curriculum integration are still in the initial stage. The application of modern information technology in teaching is not simply to solve the problem of blackboard writing in the classroom, nor to make the teaching form fancy, but the intervention of modern information technology can let us change the teaching concept from a deep level, so teachers and students should A comprehensive understanding of the application of information technology in teaching, the correct use of modern information technology to complete teaching activities. The application of modern information

technology in teaching has broadened the source of knowledge, broke the single situation of teaching knowledge by teachers, enriched classroom teaching, expanded the amount of knowledge, and changed the reconstruction and expression of teaching content. Students can acquire knowledge from multiple channels, explore a wider space of knowledge, and explore a variety of forms. With the introduction of modern information technology, teachers are no longer the authority of knowledge, but the designers of knowledge reconstruction in the teaching process, the leaders, organizers and participants of students, the consultants; the ways and methods for students to learn knowledge. With the change, students can use the information resources provided by modern information technology to carry out independent learning, cooperative learning, collaborative discussion-based learning, and give full play to the student's dominant position.

Students have a strong interest in information technology courses, but most students' interest is mainly on "playing". Students can improve their interest in learning by "playing" and mastering knowledge without losing a happy learning method. Guide the students, the students will lose their focus, and the learning tasks will deviate from the track. Everyone knows that the students have lost their computer skills and skills in the fierce and exciting competition. How can they improve their operational ability and information literacy? I have observed a lot of students playing games. Through online chat, their fingering skills and speed of text entry are still far from each other according to professional requirements.

### **3. MOOC's function in higher education**

With network information technology, MOOC focuses on bringing the world's quality education resources to the most remote corners of the world, effectively integrating the high-quality curriculum resources and technological frontiers of world-class universities, maximizing and maximizing the release of the energy of online education. In addition, the curriculum resources within MOOC can be "split-aggregate-reuse", which saves teachers' time for writing, and presents the teaching effect in a realistic and detailed way, so that students can acquire knowledge in a pleasant and relaxed atmosphere.

The MOOC in the new era effectively broke through the limitations of the original teaching ecology of colleges and universities, and teachers are no longer the sole authority of knowledge. Under this circumstance, teachers and MOOC lecturers may explain the situation of a course together, test the teacher's knowledge reserve and improve the space, and make more and more unconscious teachers have a "crisis sense". Therefore, this can, to a certain extent, urge teachers to actively improve themselves and constantly improve their knowledge reserves. For teaching experts, the MOOC platform provides an opportunity to showcase teaching and make its development prospects clearer.

In traditional teaching, textbooks are the only authority for knowledge acquisition. With the continuous updating and development of information technology, learners have realized the possibility of acquiring knowledge anytime and anywhere, and have realistic operability. With the help of modern information technology, MOOC re-integrated internal curriculum resources, provided learners with more professional knowledge learning channels, expanded the teaching content infinitely, and realized its knowledge expansion function.

### **4. MOOC specific application in higher education**

In the flipping course, the practice of video plays a role in teaching as an example. In the reform of traditional education, a scholar in the United States allowed students to watch videos before class, complete assignments based on videos, and then let students conduct lectures and activities for about 10 minutes. After the test, students were found to have improved their scores by 20%. Through the flipping classroom experiment for students with different differences and different levels, the following conclusions are drawn: The flipping classroom is very suitable for the project teaching method, and the skill-based classroom has certain practical advantages in the flipping classroom. The study found that flipping the classroom can improve students' 70% interest in

learning and self-learning, and the correct rate is 55% higher than the traditional classroom. This application form directly applies MOOC to classroom teaching. The theoretical teaching content, organizational learning activities and topic discussions are all carried out online, which enhances the students' practical ability and practical ability, and further improves the follow-up assessment.

Cross-school credits are the application of MOOC in the field of professional development. This form of application provides the learner with a continuous and complete learning experience. In the true sense, the disengagement of the university classroom is realized, so that the teaching links such as lectures, discussions, and examinations can all be carried out in the cyberspace (see Figure 2). This model has enabled MOOC to be closer to normal classroom instruction. In addition, this application mode allows college students to conduct "cross-school electives" and mutual recognition of credits. At present, this model has had successful practical experience in China: 19 colleges and universities in Shanghai have been established online in 2013. With the "Good University Online" MOOC platform, cross-school credits have been achieved, and the follow-up feedback effect is good. In the development of the new era, based on the many needs of personnel training, China has intensified the construction of quality resources courses, and the results are gratifying. A large number of professional and distinctive course videos have appeared, and more and more students are being online. Learning applications. The establishment of excellent resource courses and sharing alliances makes time and space no longer a limiting factor for learners, and allows colleges and universities to select credits and mutual recognition across campuses, optimize and upgrade the concept of MOOC, and promote the reform of classroom teaching mode in colleges and universities.

## **5. Major issues to be solved**

It is important to train teachers first. Modern teachers should have the cultivation of modern information technology literacy skills. People should look at a university in addition to the various standards in the traditional sense, especially depending on whether it has various equipment technologies for acquiring modern information. Whether school teachers have the ability to use modern information technology to guide students. The effective use of computers and their networks under the guidance of advanced educational ideas and educational theories will become a fundamental condition for a university to continue to modernize and internationalize. The network should be regarded as the foothold and support point for the development of higher vocational colleges. is an indispensable symbol in today's email address, but it is a symbol, a symbol of an era. Only when the concept and teaching behavior are simultaneously transformed can we truly realize the essential transformation of the concept of education, and truly enhance the awareness and practice of the concept of education. The application of modern information technology has promoted the transformation of teaching behavior, and at the same time, it can simultaneously and effectively transform the teacher's educational concept, so that the transformation of the educational concept is truly implemented.

There are great restrictions on the learning time and space of students. Because of the limitations of time and space, students' autonomy cannot be fully exerted. Now students can receive real-time interactive classroom teaching online. You can attend classes at any time by using IP courseware, and watch several different lectures at different locations at the same time. The distance between time and space will not become a student. Barriers to learning and communication. Greatly broaden the horizons of students, make learning content lively and interesting, easy to remember, understand and master. It provides a possibility for learners to learn independently at the right time, flexibly grasp the progress of the progress, choose their favorite courses, and instruct teachers, and add new dimensions and directions for teaching.

The rapid development of modern information technology will inevitably lead to profound changes in education. The Internet has entered our lives, and the network has penetrated into all areas of society, causing profound changes in the way of production, life, learning, work, and thinking in the entire society. In the information society, the knowledge and skills of modern information technology, especially computer-based network knowledge and skills, will become the

basic requirements for talents in all sectors of society. At the same time, with the wide application of the Internet, the virtual world formed by the Internet has become apparent. Each of us will live in two universes, one is the material world of atoms, and the other is a virtual world of digital formation. For today's students in higher vocational colleges, traditionally relying on teachers to impart knowledge, this will inevitably lead to narrow knowledge and lack of information. Modern society is changing with each passing day, and knowledge is updated very quickly. It is required to organically combine the basic knowledge with the latest information of the discipline, so that high-level students can not only learn but also actively grasp various symbols in the network, and carry out symbol exchange and symbols on the network. Creation has become the main body of the Internet age, not the computer "slave" of lost subjectivity and the "net of things" in the network. Therefore, modern information technology can more effectively develop learning resources with its large-capacity information, instant information speed, information collaboration and interaction beyond time and space, and information browsing and downloading as desired.

## **6. Conclusion**

The influence of the development of modern information technology on higher vocational education is all-round and very profound. The development of modern information technology indicates the future development direction of higher vocational education. With the widespread application of modern information technology in higher vocational education and teaching The modern concept of higher vocational education will eventually be established.

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