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Creating Learning Opportunities is an Inevitable Requirement to Improve the Teaching Quality of University Courses

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Abstract. Under the background of "Internet + education", it is emphasized that learning opportunity is the inevitable requirement for implementing educational reform concept and improving teaching quality. This paper discusses the meaning and two existing forms of learning opportunity, forms the creation mechanism of learning opportunity, and puts forward the strategies and ways of creating learning opportunity.

In view of the current situation of university professional course teaching, the implementation scheme of university course teaching system using MOOC learning opportunity is designed. In the MOOC online learning link, students conduct MOOC video learning in advance, communicate and learn in the problem discussion area, and complete the corresponding MOOC homework. In the off-line classroom practice teaching, teachers adopt the "three-level cycle" organic operation mode, combining with students' MOOC learning feedback, and carry out targeted classroom teaching from the new knowledge teaching module, the comparative teaching module to the comprehensive teaching module. This teaching mode, by using MOOC platform, creates suitable learning opportunities, broadens students' horizons, mobilizes learning initiative, weakens the negative impact of the network, overcomes the difficulties of classroom teaching, improves learning efficiency, obtains good teaching effect, and can be further developed, popularized and applied.

Introduction

In order to meet the needs of social development and cultivate high-quality innovative talents, colleges and universities have carried out all-round education reform, and no significant teaching effect has been achieved. The deep reason lies in that the innovative idea of teaching reform is integrated in teaching, students still follow the teacher's rhythm, passively learn book knowledge, and deprive students of the right of independent learning. Under the background of "Internet + education", making full use of learning opportunities is an inevitable requirement for implementing the educational reform concept and improving the quality of university teaching.

1 Learning Opportunities

1.1 Meaning

There are two different definitions of learning opportunity: (1) in Carroll School learning model, it is defined as "the time allocated to learners to learn specific content", and Carroll regards learning opportunity as a teaching variable. (2) Hewson defined it as "the consistency between the content taught to the students and the content measured in the achievement test. The more they match, the more learning opportunities there will be." Hewson regarded learning opportunities as a measurement variable. Combined with the actual university curriculum teaching, learning opportunity is the space for the learning subject to participate in the whole learning process, including the internal perception, thinking activities, external expression, operation mode, learning environment, etc., which directly affects the learning effect of students.

There are two forms of learning opportunities: one is potential, which needs teachers and students to explore together, to become specific and explicit learning opportunities, to be classified as the space occupied by different learning activities; the other is generated, which needs teachers and students to create randomly, and the creation of learning opportunities is abstract and implicit. The premise of effective learning is to create learning opportunities for students.

1.2 Effect

Learning opportunity, as a teaching variable or measurement variable, is the key factor that affects the quality of teaching and learning. First of all, learning opportunities emphasize the main participation of students. The strong participation of the main body is a sign of strong learning interest and motivation of students, which can fully mobilize the enthusiasm of students in classroom teaching and produce significant teaching effect. Secondly, learning opportunities put forward higher requirements for teachers, which requires teachers not only leave enough space for students to observe, think and discuss, but also complete classroom teaching tasks. This requires teachers to carefully design every teaching link, including studying teaching materials, understanding students and improving teaching skills. To provide students with learning opportunities can motivate teachers to study teaching carefully.

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The perspective of traditional university teaching only provides little learning opportunities for students, which affects the quality of teaching. Only by reforming teaching, using new educational ideas and changing learning methods, such as research-based learning, cooperative learning and MOOC learning, can we create more learning opportunities for students, strengthen the positive interaction between teachers and students, and improve the teaching effect. The creation of learning opportunities can not only promote the development of education, but also promote the development of education.

2 The mechanism of learning opportunities

2.1 explore learning opportunities

The learning process of students can be divided into classroom learning and extracurricular learning. There are many learning opportunities hidden in these two learning stages. With the help of teachers, students can fully explore these learning opportunities, can play their learning potential, and get good teaching and learning results.

For college classroom learning, teachers can explore learning opportunities from different teaching links. (1) when introducing new knowledge, we should inspire and guide the students properly and timely by examining the previous knowledge or experimental demonstration or self-study, give them the opportunity to review the old knowledge, think deeply and explore the new knowledge, stimulate their interest in learning and train their thinking, and make the knowledge learned by the students systematic by the correlation of the new and old knowledge. (2) when explaining concepts or laws, inductive teaching method is used to guide students to give examples, analyze and generalize; deductive teaching method is used to guide students to make logical reasoning step by step, to conceive possible inference, and to draw reasonable and correct conclusions after rigorous analysis and demonstration. Students can master the connotation and extension of concepts and laws in an in-depth and comprehensive way, and cultivate their abilities of analysis, judgment, reasoning, induction and generalization. (3) when using the learned knowledge to solve problems, they should be good at guiding students to put forward problems, analyze problems, strengthen the discussion on the results of problems, prompt students to summarize the methods of solving problems, and discover and put forward new problems. Through problem-solving, students' problem-solving ability is cultivated, so that students can master learning methods and develop a scientific attitude of brave exploration.

For College Extracurricular Learning, it is divided into pre class preview and after class expansion, which mainly depends on students' consciousness to seize learning opportunities. To a great extent, students' learning consciousness depends on Teachers' teaching skills, teaching experience, personality charm, sense of responsibility and love. Good classroom teaching can arouse students' enthusiasm in learning, make them consciously study outside class, explore new knowledge and consolidate old knowledge. Responsible teachers let students go out of the classroom with problems, help students solve extracurricular problems, strengthen communication between teachers and students, close the relationship between teachers and students, produce empathy effect, make students love learning and seek learning opportunities. The exploration of extracurricular learning opportunities will help students master knowledge and develop their self-learning ability.

2.2 Creating learning opportunities

In the interaction of teaching and learning, there will be some new problems or sudden situations, which is a great opportunity for students to create learning opportunities. When there are difficult problems in teaching, it is not conducive to learning to adopt the attitude of neglect; it will be transformed into learning opportunities, teachers and students will cooperate to explore problems, or let students independently find information to solve problems, improve students' ability to solve problems independently, and develop a scientific attitude of seeking truth from facts and making progress in research.

It is also an effective way to create learning opportunities for students to set up learning barriers or make mistakes in students' learning. For the more complex knowledge in teaching, it is difficult for students to digest and absorb it by teaching the students as a whole in a chaotic way; from different angles and levels, the problems are analyzed and presented to students in a simplified form of first decomposition and then combination, so as to create suitable learning opportunities for students, and students can easily grasp the knowledge. Students learn how to face and solve difficult problems.

In order to explore and create learning opportunities for students, higher requirements are put forward for teachers' teaching behaviors and roles, and teachers are required to reduce teaching rights and increase learning opportunities for students' participation. Teachers should change their roles and become the guides of students' learning; teachers should improve their teaching skills and become the creators of students' learning opportunities. Create learning opportunities, effectively promote the virtuous cycle of teaching and learning, so as to improve the quality of teaching and achieve the goal of talent training[1].

3 The implementation plan of university curriculum teaching to create learning opportunities

3.1 The current situation of university professional course teaching

The university professional course system is the carrier to achieve the goal of talent training, which is divided into two parts: Theory and practice. It is composed of general courses, professional basic courses, professional core courses, professional elective courses, professional practice courses, etc. these courses form the connection and integration

relationship between culture and foundation, foundation and development, development and application, application and innovation.

In order to adapt to the development of science and technology, colleges and universities are constantly adjusting the professional curriculum system. It is mainly manifested in: increasing the number of new courses, increasing the heavy content of courses, reducing the teaching hours, increasing the learning difficulty of students, and putting forward higher requirements for teaching, etc., resulting in serious disconnection of knowledge, thinking and skills inside and outside the course, which is not conducive to the completion of talent training objectives.

Traditional teaching is widely used in universities, with teachers' classroom teaching as the main mode. The course content is abstract and boring, and the students' basic differences are large; the content is more, but the class hours are less, and the learning task is arduous; the textbook is the only learning resource, which affects the preview and review; the assessment method is single, mainly based on the final exam... These affect the learning effect and teaching quality. According to the survey, the causes of the above problems are mainly concentrated in the following aspects:

(1) subtle changes have taken place in the way of learning. The intelligent mobile phone makes the Internet become the main way for students to obtain information. The network information resources take up too much time and energy for students. Contemporary college students' access to information has changed from passive listening to lectures to active learning interest, lacking interest in classroom content, so they give up avoiding learning. The most effective way is to optimize network resources, turn them into learning opportunities, and serve education and teaching.

(2) old teaching contents and methods. It is the most urgent task for non professional courses to update the version of curriculum materials, which has little change in content and involves little application of science and technology frontier, so as to keep students away from social life practice[2].

(3) backward teaching methods and means. Using traditional teaching, that is, blackboard plus teaching materials, old teachers like to write blackboard, logic analysis, too time-consuming and laborious, teaching efficiency is low. Young teachers use multimedia teaching to show only static PPT, which also affects the teaching effect.

3.2 The design of teaching system for university courses

Under the background of "Internet + education", aiming at the current teaching situation of university professional courses, this paper puts forward the teaching mode of MOOC to create and integrate learning opportunities, and formulating the overall implementation plan of "two links and three stages". This teaching mode, by using MOOC platform, creates suitable learning opportunities, broadens students' horizons, mobilizes learning initiative, weakens the negative impact of the network, overcomes the difficulties of classroom teaching, improves learning efficiency, obtains good teaching effect, and can be further developed, popularized and applied.

In the process of curriculum implementation, teachers should fully and effectively connect and integrate MOOC online learning and offline classroom practice teaching, and develop a system design scheme based on MOOC learning opportunities. In the first stage, according to the University's professional curriculum syllabus, MOOC resources and selected teaching materials, teachers set learning content and learning objectives suitable for students. In the second stage, students preview the contents of the teaching materials and MOOC video learning, and complete the assignments in the MOOC discussion area. Through MOOC backstage, teachers master students' learning, discussion and homework, as an important basis for classroom teaching, targeted classroom teaching. In the third stage, the assessment results are composed of the usual results and the final examination results, and the proportion of the usual results is increased, accounting for 50% of the total final results. The usual results are composed of MOOC learning level, MOOC discussion, MOOC homework and classroom performance[3].

3.3 MOOC online learning and offline classroom practice teaching

In MOOC online learning, students conduct MOOC video learning in advance, exchange learning in the problem discussion area, and complete corresponding MOOC assignments. In the off-line classroom practice teaching, the logical structure of university professional course knowledge is analyzed. The off-line classroom practice teaching adopts the "three-level circulation" organic operation mechanism, namely from new knowledge teaching, comparative teaching to comprehensive teaching[4].

New knowledge teaching module. Combined with the syllabus and teaching materials of university courses, teachers observe and evaluate students' MOOC learning, discussion and operation, classify and sort out students' MOOC learning and difficult problems, and take feedback as the key point of classroom learning. The teacher explains the important knowledge points, exchanges the difficult problems in MOOC study with the students, arranges the corresponding classroom exercises, guides and helps the students to establish the knowledge thinking map.

Comparative teaching module. Using comparative method, analyzing different knowledge points or thinking methods, mining the differences and connections between them, deepening knowledge understanding, mastering thinking methods skillfully, forming tree like knowledge structure, constructing clear thinking map, improving learning efficiency, cultivating problem-solving ability and ensuring teaching quality. The comparative teaching object can be the comparison of two small knowledge points, thinking methods, contents of different chapters, contents of interconnected courses or contents of related disciplines, so as to find out the differences and similarities, and promote the mutual connection and integration of knowledge and thinking[5].

Comprehensive teaching module. Comprehensively use different knowledge, jointly build new knowledge, and solve complex practical problems. For it major students, we can use the knowledge of computer, advanced mathematics, college physics, circuit design, sensor principle, single chip computer C language programming and other courses to

investigate and study a practical problem, obtain object information, simplify assumptions, analyze internal laws, establish mathematical models with mathematical symbols and languages, and carry out mathematical models. Simulation exploration, draw scientific results and conclusions, solve practical application problems, develop new intelligent sensor application system, etc.

Summary

Making use of the Internet environment, creating learning opportunities suitable for students and playing the role of MOOC learning platform have greatly promoted teaching and learning. Broaden students' vision, stimulate their interest in learning, improve students' learning efficiency, ensure the quality of classroom teaching, and realize the "Online + offline" connection and integration of university curriculum teaching mode. In the future practice teaching, we should adjust and update the teaching content at the right time, carefully analyze the students' learning situation, use advanced teaching methods, improve the students' enthusiasm for learning, constantly summarize the experience and lessons, connect and integrate the "Online + offline" teaching and learning relationship, ensure the quality of teaching and learning, and achieve the goal of university professional personnel training.

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