

Research on Network Teaching Mode System

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ABSTRACT

Network teaching, especially Internet-based network teaching, will impact the traditional teaching mode and become the mainstream teaching form in the new century. This article mainly expounds the characteristics and classification of network teaching mode, discusses the existing problems and solutions in current network teaching, and constructs the network teaching system structure.

Keywords: *teaching mode, network teaching, teaching platform*

1. INTRODUCTION

Network teaching is a product of the information age. Computers and networks provide a strong support for college education in the information age. It will impact traditional teaching modes and will become the mainstream teaching form in the new century. As a college teacher in the new era, he has a good understanding of the current situation and prospects of network teaching, and continuously practice and explore according to different teaching modes of network teaching, which has far-reaching significance for the development of network teaching.

2. CLASSIFICATION AND CHARACTERISTICS OF ONLINE TEACHING

The Classification network teaching mode is a non-face-to-face modern education mode based on computer technology [1]. It can quickly, efficiently and economically meet people's educational needs. It has multiple functions integrating computers, communication networks, satellites, and education. It is open, information intensive, high efficiency.

2.1. Characteristics of Network Teaching Mode

The main feature of network teaching is to transform the traditional classroom teaching from the teacher's teaching as the center to the student's learning as the center. It really turns the teaching process into a teacher-led and student-oriented teaching process, which promotes the internal factors of students [2]. The exertion of this makes them change from passively accepting knowledge to actively acquiring knowledge, thereby providing the necessary objective conditions for the cultivation of innovative and creative abilities.

The advantages of introducing network teaching are:

(1) The introduction of network teaching is conducive to breaking through the limitations of teaching time and space. The campus network can connect computers in schools and other networks. As long as the learners have the Internet conditions, they can learn freely and selectively through the network anywhere and at any time without time and space restrictions.

(2) The introduction of network teaching can diversify the forms of education and help teach students in accordance with their aptitude. In network teaching, various forms can be used, such as audio, video, email, BBS, online discussion, etc. to implement teaching and information feedback and communication. Students can learn and improve in a form suitable for them according to their needs. In this way, the network teaching mode can truly achieve the purpose of teaching students in accordance with their aptitude and developing individuality.

(3) Introduce network teaching to stimulate students' interest in learning, mobilize students' enthusiasm for learning, and improve students' autonomy. Network teaching can introduce multiple forms of content and all related knowledge. It is broad in knowledge, diverse in form, rich in subject matter, and flexible in learning methods [3]. The communication between teachers and students is bidirectional and timely. The discussion issues can present a wide range of participation and interaction. Students take the initiative to participate in learning according to their own cognitive level, which greatly stimulates students' interest in learning and mobilizes their enthusiasm for learning.

2.2. Classification of network teaching modes

There are roughly the following types of network teaching modes:

2.2.1. Lecture mode

The teaching mode can be divided into two modes: real-time (synchronous) teaching and non-real-time

(asynchronous) teaching. It inherits the traditional teaching mode that teachers teach and students accept class-based teaching, but it breaks through the traditional classroom. The restriction of location can expand the scale of education, and the openness is strong. The use of the Internet can increase the interactive activities of teachers and students, thus playing a certain role in network teaching [4]. The disadvantage is the lack of classroom atmosphere and the lack of authenticity of the learning situation.

2.2.2. Exploratory mode

The exploratory mode includes short-term and long-term levels. It means that teachers determine a topic according to the teaching goal, use network technology and network teaching resources to create topics, collect relevant information, and process it, establish hypotheses, and provide relevant information through the Internet. Discipline research materials, historical background and the latest developments, and then guess the answer, the teaching mode to draw conclusions. This mode focuses on cultivating students' inquiry ability and information literacy processing ability, rather than the teaching of knowledge, so the basic knowledge that students can learn in class is too little [5-6]. Therefore, this mode is particularly suitable for the deepening of the knowledge that has been learned, the teaching of research courses and the learning of open experiments.

2.2.3. Collaborative mode

Collaboration mode Collaboration is divided into competition mode and collaboration mode. It refers to a process in which multiple learners interact and cooperate with each other for the same learning content by using computer networks and multimedia and other related technologies to achieve a deeper understanding and mastery of the teaching content. In this mode, information resources can be shared, which is conducive to emotional communication between individuals and groups, stimulates students' learning motivation, improves students' participation and initiative in learning, and is also conducive to promoting the development of students' advanced cognitive abilities and Cultivation of independent learning ability, cooperation ability, information ability and innovation ability.

3. MAIN EXISTING PROBLEMS TEACHING DESIGN OF ONLINE COURSES IN THE CURRENT

At present, people think that the main task of online learning is to carry out systematic learning on the Internet, so that in current network teaching, only systematic

learning is carried out on the Internet. It has the following obvious shortcomings:

3.1. The Lack of Learning Situation Design Makes it Difficult for Students to Develop Their Learning Initiative

A good learning situation is conducive to the use of relevant experiences in the original cognitive structure to assimilate the new knowledge currently learned, and it is also conducive to transforming students' external learning motivation into internal learning motivation, driving students' curiosity, and arousing exploration and discovery to learn actively. However, most of the current online courses still emphasize "teaching", and only emphasize the transmission of knowledge. Knowledge teaching starts as soon as you enter, without a certain contextual introduction. Most of the courses are simple presentations of text teaching materials or teacher's lecture notes, instead of setting up a simulated real learning situation for learners, so that learners cannot gather attention, memory, and thinking together for deep learning, and cannot fully reflect learners' Initiative.

3.2. Teaching Concept Has not been Completely Changed, and the Role of Teachers is not Accurate

In the process of network teaching, the teacher's task is never just to transform lectures into multimedia presentations. The word-of-mouth communication between teachers and students is replaced by information interaction on the Internet. Teachers should change their teaching concepts and integrate network teaching concepts with modern educational technology. Really use it in actual teaching. The current network teaching is limited to teachers' online Q&A, teacher-student discussion, lack of teachers' organization and guidance of discussion activities and attention to learners' learning activities, and it has not really realized group learning and collaborative learning. Therefore, when teaching under the network teaching mode, it is necessary to follow the principle of combining the teacher's leadership and the student body, give full play to the teacher's guiding role, ensure the high efficiency and effectiveness of the network teaching, and realize the effective connection between modern education technology and traditional teaching.

3.3. Lack of Independent Learning Resources

Autonomous learning is a major feature of network teaching. Learners can realize the separation of time and space in learning activities through autonomous learning. At present, network teaching only reflects the learners' self-learning in terms of autonomous learning, and does not provide them with all kinds of resources that are

conducive to autonomous learning. In the existing teaching resource database, teachers' handouts and some classroom teaching materials are often stored, which are used by teachers more and less by students. The lack of online independent learning resources directly affects the effect and enthusiasm of learners in network teaching, and ultimately affects the overall effect of network teaching.

3.4. Form of Evaluation and Feedback is Single

Evaluation and feedback are indispensable links in teaching. Whether to achieve the purpose of network teaching requires a set of evaluation systems and evaluation tools. At present, the evaluation method of network teaching in colleges and universities is limited to the evaluation of teachers on learners, and rarely considers the evaluation of learners themselves and peers. The evaluation forms are generally only subjective questions in the form of objective questions and short answer questions, lacking case-based and problem-solving methods Exercises. This kind of evaluation method cannot bring out the advantages of the two-way communication of network teaching, so that learners cannot get feedback information in time, and to a certain extent, it reduces learners' enthusiasm for learning.

4. COUNTERMEASURES TO CONSTRUCT A NETWORK TEACHING MODE

4.1. Changing the Traditional Teaching and Learning Concepts of Teachers and Students is a Prerequisite for the Development of network teaching

To truly realize network teaching, both teachers and students must completely get rid of the shackles of traditional education thinking modes and concepts. Teachers should be proficient in the professional knowledge, use the technical advantages of the teaching network, open up multiple channels, and try to meet the requirements of various interactions; students should learn to learn, and be good at using various information resources in the network environment to select and process In order to acquire new knowledge, instead of passively memorizing and memorizing the content taught by teachers, we must be good at independent thinking, brave in exploring, and use online learning tools to think deeply about doubts and difficulties to achieve the purpose of solving problems.

4.2. Improving Students' Autonomous Learning Ability is the Key to the Development of network teaching

Autonomous learning capabilities include self-screening, setting goals, finding learning content by yourself, determining learning methods and approaches by yourself, and self-management learning. The construction of the network teaching mode must always focus on letting students become the masters of learning and cultivating their awareness and ability to actively explore and discover knowledge. At the same time, it pays attention to improving teachers' adaptability to network teaching media, focusing on the screening of online information, and scientifically designing students' online operation time and intensity.

4.3. Strengthening the Construction of Network Resources is the Core of Developing Network Teaching

The implementation of network teaching requires a lot of teaching resources, and the construction of network resources is the core of the development of network teaching. Network teaching resources should have three elements: First, the teaching resources provided to the learning subject must be conducive to the control, organization and management of the school; second, the teaching resources for the learning subject are open, expandable, and interactive, Thirdly, the resources of the entire network are extremely rich but organized. When constructing network resources, we must make full use of various conditions, based on the combination of internal and external, and gradually improve, develop and accumulate online resources, so that the resource library has the characteristics of sharing, dynamic, innovative, and diverse.

4.4. Improving the Network Hardware Environment is the Guarantee for the Development of Network Teaching

Network teaching is built on the basis of modern communication technology, computer technology and network technology. It requires relatively high hardware environment such as computers and communication facilities. A good network teaching infrastructure is the guarantee for the development of network teaching. At present, the computer penetration rate in our country is low, the network transmission speed is too slow, and the Internet cost is high. These objective network hardware problems will seriously restrict the development of our country's network teaching. Improving the network hardware environment will provide strong material support and guarantee for the development of network teaching.

4.5. Complementary Advantages of Traditional Teaching and Development of Network Teaching is a Realistic Need

In network teaching, students can connect to remote teaching websites through the Internet at any time and any place to obtain teaching resources suitable for autonomous learning for autonomous learning. However, network teaching is not as good as classroom teaching in real-time interaction and lacks emotional communication, which is not conducive to people. Healthy development, etc., and in the field of basic education, students' learning methods, learning skills and self-discipline are not yet fully adapted to network teaching. Therefore, network teaching and traditional classroom teaching should be divided into labor and cooperation and complement each other.

4.6. Create a New Evaluation System to Highlight the Main Status of Students

Measurement and evaluation are an important part of the teaching process and an important means to ensure the quality of teaching. In the evaluation of students, the object of evaluation becomes the subject of evaluation, which is conducive to students' self-understanding and self-confidence, and also helps students and regulate their own learning process, thereby promoting the continuous development of language ability.

5. TEACHING PLATFORM SYSTEM IN THE NETWORK TEACHING MODE

In order to achieve the goals proposed by network teaching, the platform system of network teaching should at least consist of the following parts.

5.1. Network Courseware System

It is a platform for students to study independently. Based on the knowledge unit, using multimedia technology, network and database management technology, the teacher's classroom teaching resources, such as multimedia materials, courseware, test questions, cases, etc., are organized into a database according to the agreed method, and then indexes are established to prepare resources. For retrieval and use when sharing, network courseware should have a "selection" function, and students can dynamically adjust their learning progress and content according to their own learning situation.

5.2. Network Test System

This system includes test question bank, test paper generation tool, test process control system and test result analysis tool, homework arrangement and review tool. The test questions should cover all the teaching content of the course. The difficulty of the test questions is divided into three types: elementary, intermediate and advanced. Students can choose the chapter and difficulty of the test according to their own learning needs. After the test, the system will automatically count the answer rate, correct rate and test. Achievements and provide reference answers.

5.3. Network Answering System

It is mainly used to help students review the knowledge they have learned, answer questions, and test their learning effects. When students enter online tutoring, they can answer questions in real time and interactively with the teacher, or communicate and discuss with the teacher via email.

5.4. Virtual Experiment System

The basis of the realization of the network virtual laboratory is the combination of multimedia computer technology, network technology and simulation technology. The virtual experimental environment can supplement the deficiencies of the in-class experimental courses, can improve students' computer analysis of problems, solve problems and computer-aided design capabilities, enhance students' sense of reality and get twice the result with half the effort.

5.5. Teaching Discussion System

The communication between teachers and students is a very important link in teaching activities. Through communication, students can get answers to questions, and teachers can also understand the current learning situation of students. Establishing an effective communication environment in the network teaching mode can facilitate the communication between teachers and students in different places, thereby effectively improving the quality of network teaching activities. This system can be implemented using tools such as BBS, Email, dedicated websites, and video conferencing.

5.6. Teaching Evaluation System

(1) The evaluation of teachers' guidance activities is a comprehensive evaluation of teachers' teaching conditions. It includes teachers' self-evaluation, that is, teachers make subjective evaluations of their own teaching work; students' evaluations of teachers, through the release of teacher's teaching evaluation form on the Internet to collect students' evaluation information of teachers' teaching; system evaluation, teaching The system automatically records the process information of the teacher's teaching through the remote teaching platform, such as the number of assignments and corrections, the number of targeted tutoring, and the time spent on the Internet.

(2) Evaluation of learners' learning. It includes the evaluation of students' learning process and the evaluation of students' learning effects. Such as the evaluation of the degree of the students' choice of learning content, the evaluation of the student's homework, the evaluation of the student's question and answer, the evaluation of the student's discussion, the evaluation of the student's examination, and the evaluation of the attitude of students to participate.

(3) Evaluation of the quality of learning resources. It includes the evaluation of teaching content, the evaluation of the test question bank and the evaluation of the utilization of learning resources. Based on this information, learners can understand the use of the network teaching platform and its resources, and analyze their learning attitude, depth and breadth of understanding through the problems and solutions they put forward. Teachers can also grasp the content of teaching Information such as the degree and the degree to meet the needs of students provide richer learning resources.

In the evaluation process, a combination of student self-evaluation, peer evaluation, and teacher evaluation can be used to evaluate students' learning activities in a more comprehensive, objective, and scientific manner from multiple aspects and perspectives, so that students can be The object of evaluation becomes the subject of evaluation, creating a positive learning atmosphere; teachers should also adjust teaching plans and teaching methods in a timely manner through announcements, emails, and learning points rankings based on the feedback information of the evaluation, so as to truly promote learning through evaluation. While promoting learners to reach the learning goals of the course, they also further cultivate their independent thinking and self-analysis abilities.

In short, network teaching is an advanced modern teaching method and method under the continuous development of information and network technology. Different network teaching modes have different characteristics. Teachers should thoroughly study the characteristics and modes of network teaching in actual teaching activities. Combining

the content of lectures and the characteristics of the students, select the appropriate network teaching mode in a targeted manner, and give full play to the role of network teaching, so that network teaching can truly achieve good teaching results.

6. CONCLUSION

Network teaching is a product of the information age. Computers and networks provide a strong support for college education in the information age. At present, people think that the main task of online learning is to carry out systematic learning on the Internet, so that only systematic learning is carried out on the Internet in current network teaching. It will impact traditional teaching modes and become the mainstream teaching form in the new century. As a college teacher in the new era, she should have a good understanding of the current situation and prospects of network teaching, and continuously practice and explore according to different teaching modes of network teaching, which has far-reaching significance for the development of network teaching.

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