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Application Research of Flipped Classroom Teaching Mode Based on Network Teaching Platform¹

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Abstract: The teaching mode of flipped classroom is a mixed teaching mode. With the online teaching platform and the current network technology platform, students can learn knowledge anytime and anywhere. This model reflects important practical value in current teaching activities, which is also an important development direction of current teaching reform. Based on the current network teaching platform, this paper discusses the effective application of flipped classroom teaching mode, which is the main content of this article. It is hoped that the flipped classroom teaching model can mobilize students' enthusiasm for learning, stimulate students' interest in learning, and enable more students to achieve better learning effects in limited time.

Keywords: Network Teaching Platform; Flipped Classroom; Teaching Mode; Application

1. Introduction

By observing the relevant videos of teachers' teaching before class or after class, students can achieve more efficient practical use, and also make students in a state of free learning. This flipped classroom teaching mode involves many teaching contents, including common answers to doubts, cooperative inquiry, completion of interaction, etc., which can achieve better teaching results. The flipped classroom teaching mode is mainly used by teachers to upload relevant teaching content on the Internet teaching platform, so that students can freely choose learning topics and learning content, and express the difficulties of self-learning to achieve better teaching application effect.

2. Overview of network teaching platform

2.1 Displaying teaching resources

Teachers can strengthen the use of network teaching platform, make full use of various teaching resources, and use teaching resources to realize the introduction of teaching content, the display of teaching plans, the editing of examination questions, teaching courseware, teaching videos, etc. The data management module is used to edit, manage, edit and play various audio and video materials of chapters and textbooks.

2.2 Monitoring the learning process

Through the network platform, teachers can monitor students' learning process in an all-round and multi angle way, guide students to learn actively, and master students' learning conditions and their the learning conditions of the class. In the question and answer section, a question and answer area has been set up. For some common questions, the system will automatically answer them, and answer them through e-mail. It saves various data of online learning, expands the teaching space, and gives students a new horizon.

The integrated network teaching platform provides students with an auxiliary network learning support. Through the integrated network teaching platform, students' self-learning ability can be improved. By browsing the selected textbooks and taking notes, we can ensure the smooth completion of the assignment and effectively use the online examination, marking and other resources. Through the comprehensive network teaching platform, it provides convenience for communication between

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teachers and students. In teaching, we should communicate with the teacher about the students' problems, ask questions and discuss in groups, and create a good communication environment.

3. Advantages of "flipped classroom" based on network teaching platform

3.1 Improving implementation operability

On the integrated platform of network teaching, maturity and breadth are very prominent, which can well promote the implementation of flipped classroom. In order to promote the smooth development of flipped classroom, teachers need to attach importance to the use of information technology and establish a matching and practical teaching system to ensure its good implementation effect. However, the relatively mature teaching platform has not been established, and a lot of time and energy will be spent on the development and design of the system. Teachers have found a very mature and important teaching platform. In the implementation of flipped classroom, the system can not only provide students with necessary technical support, but also create more opportunities for students to learn and learn. At the same time, the use of flipped classroom can also enrich the content of curriculum construction, ensure the continuous improvement of the utilization rate of online teaching integration platform, and enhance the feasibility.

3.2 Improving students' acceptance of knowledge learning

When using the network teaching platform, we should reasonably set up problems, record teaching videos, and complete assignments according to the specific conditions of students to ensure that they are consistent with the teaching results. With the continuous accumulation of teachers' teaching, the teaching resources of the network teaching platform are gradually taking shape, which makes the curriculum system more perfect, and provides a good environment for the flipped classroom and a guarantee for teaching schools, in order to enables students to improve their acceptance, and better achieve the goal of all-round education.

4. Application of "flipped classroom" in network teaching platform

4.1 Pre class preview stage

With the development of network technology and the quickening pace of social life, the traditional teacher's classroom teaching mode is facing new challenges. Classroom teaching should be transformed into a "student-centered" teaching mode, which can give full play to the autonomy and creativity of students. In this teaching mode, students should fully participate in classroom discussions and be able to sort out and summarize what they have learned in class. In this teaching mode, students are the protagonists in the classroom, and teachers, as assistants, can sort out their knowledge of the curriculum and then discuss it with students to make the classroom discussion more meaningful. Through this teaching mode, students can systematically summarize the knowledge they have learned and express their opinions, thus accumulating a certain amount of emotional accumulation for the knowledge they have learned in the classroom. Through this teaching mode, students can be actively involved in learning, effectively enhancing the recognition of students to the learning results. Therefore, classroom teaching reform through the use of network teaching platform is not a negative change in classroom teaching methods.

"Flipped classroom" is mainly used to teach teaching content by watching teaching videos, PPT and other teaching materials. When learning the content of the programming structure, according to the syllabus and teaching purposes, pre record 5~10 minutes of video of sequence, branch and cycle programming content, and make corresponding PPT, and upload the learned content to the network in the form of video, PPT, lesson plan, etc. In the classroom, the teacher will arrange the learning time in the classroom and let the students make corresponding adjustments according to their own learning conditions.

Teachers should understand the common problems in the process of making videos. Respecting students' subjectivity and allowing students to keep their voice, so as to maintain an effective connection between the production of videos and students' needs, students' actual development level. Students are interested, and increase the effectiveness of mathematics flipped classroom teaching. The first is the humanization of video. Video production pays attention to the integration of delicacy and subjectivity, realizing the humanization of teaching videos, and making students have a strong interest in their knowledge. The second is to adopt continuous production planning. The production of video cannot be static. It must have a lasting feature, that is, teachers can add videos on the Internet, or discuss changes in video content with students on the Internet to make videos more reasonable.

4.2 Classroom teaching stage

For teaching implementation, teachers can use the network teaching platform built by the school, such as the current wis-

dom tree software system. The system construction is based on the idea of "Internet plus", advanced information technology, "people-oriented" as the starting point, and "teacher-student interaction, student management, teacher communication; teacher-student interaction, teacher management, student management; knowledge sharing, knowledge acquisition, skill training" as the goal, in order to realized "resource sharing and complementary advantages". According to the characteristics of the course, the wisdom tree software system has constructed a "classroom+classroom" model for students' personalized learning. Through pre class preview (teaching), questions in class, homework, knowledge competition, interactive communication and online discussion, students and teachers can learn interactively; The Smart Tree software system not only provides teachers with real-time teaching services, online guidance services, after-school homework, knowledge answering guidance and other teaching services, but also includes rich teaching resources for students to learn independently. The smart tree software system mainly manages the learning process by combining with the mobile platform. The Smart Tree software system provides "teacher-student interaction" services, which can be combined with the mobile platform to provide students with a variety of convenient learning services such as rich resource download experience.

4.3 Practical effect

The teacher adopts the method of "flipping the classroom" to make the students' learning effect in the classroom significant and enhance their learning enthusiasm and initiative. After each class, students can use the network teaching platform to log on the network, check the results of the previous class, and download new assignments. Because students' computer operation levels are uneven, students with poor computer skills cannot complete the traditional practical courses. Students will choose to surf the Internet, watch movies and play small games. Now, the "flipped classroom" gives students a strong learning atmosphere and enough time and space to think.

5. Conclusion

To sum up, through practical operation, the "flipping" classroom teaching method based on network technology is applied to teaching, which can effectively solve the problems of low resource utilization and short experiment time, and can effectively improve the effect of experimental teaching. It can not only meet the needs of individualized teaching with students as the main body, but also mobilize students' interest in learning, and effectively promote students' innovative thinking, autonomous learning ability and ability to cooperate with others, thus improving teaching quality. Teachers should grasp the advantages and characteristics of the current flipped classroom teaching, combine teaching subjects, and improve their own teaching ability, in order to master the corresponding computer technology, ultimately improve the comprehensive effect of classroom teaching and promote the realization of the goal of education reform.

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