Research on the Application of Hybrid Teaching Mode of
Cloud Classroom Platform in Organic Chemistry Teaching of
Higher Vocational Education

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Abstract. On the basis of rapid progress in the Internet era, the education of undergraduate students has been innovative development. At present, the hybrid teaching mode of application-oriented cloud classroom has become a new direction of education reform in many vocational schools. It is found that in the process of organic chemistry teaching, cloud classroom teaching mode has become an educational means with many advantages. Educators found that the combination of online teaching and offline teaching can cultivate the ability of independent learning of chemistry students. It can make a better teaching effect[1].

Keywords: Cloud Classroom, Hybrid Teaching, Organic Chemistry

1. Introduction

With the rapid renewal of chemistry in recent years, the teaching content of organic chemistry has become more complex and varied. Students in the chemistry department also have greater learning needs. It is difficult for students to satisfy the teaching method of offline teaching. They think offline teaching is not comprehensive. The teaching goal of organic chemistry is multi-dimensional. Its teaching and learning methods should also be diversified[2].

At present, the society and science and technology are constantly updated. The requirement of scientific literacy is the educational innovation that vocational colleges must grasp. Under this premise, the teaching mode of cloud classroom is put forward. According to a large number of studies, the effect of cloud classroom teaching mode in the teaching of organic chemistry in higher vocational colleges is significant.

2. Simple description of cloud classroom teaching mode
2.1. Definition of cloud classroom

In short, cloud classroom is an information-based teaching method. Its foundation is the cloud computing technology of the Internet. Many teachers think it is a mobile teaching classroom form that can use the Internet environment to meet the classroom interaction between teachers and students. Generally speaking, cloud classroom consists of two parts: teaching resource service platform and client platform.

2.2. The structure of cloud classroom

According to the above description, we can find that the structure of cloud classroom includes teaching resource platform and client platform. Teaching resource platform can provide free courseware for teachers. It can also provide different teaching resources for students. These resources can satisfy the cultivation of students' autonomous learning ability. The client platform can expand the main way of online communication between teachers and students.

2.3. The significance of cloud classroom

It can be said that the emergence of cloud classroom is a huge educational revolution in the education field. People have been used to the traditional offline teaching method. The online teaching method is novel for teachers and students. However, this novel teaching system can help students to study independently at home. It can also help teachers quickly organize teaching courseware. In addition to the classroom, teachers and students can also communicate appropriately through the cloud classroom. This way of learning is suitable for the cultivation of students' learning ability[3].

3. Advantages and disadvantages of offline organic chemistry teaching mode

The content of organic chemistry is very complicated. Therefore, compared with online teaching, some parents of students may believe in the level of offline teaching. Generally speaking, the offline chemistry classroom teaching mode has many advantages and disadvantages.

3.1. Advantages of offline chemistry classroom teaching

Offline classroom is a complete and concrete teaching form. It includes a classroom, a teacher and many students. Students and teachers can teach and transmit knowledge face to face in reality. Students can directly put forward their own problems to the teacher. The teacher can judge and answer immediately. The effect of this way of learning is obviously efficient.

3.2. Disadvantages of offline chemistry classroom teaching

We can't make sure that every student has patience. This is unscientific. Although offline chemistry teaching is efficient, it still has many defects. According to statistics, many students in the Chemistry Department say that the chemistry class is boring and they can't choose the learning content according to their preferences for knowledge. Generally speaking, the essence of offline teaching is the mechanical transmission of knowledge from teachers to students. This way is not conducive to the cultivation of students' chemical learning ability (see Table 1).

Table 1. Advantages and disadvantages of the teaching mode of Organic Chemistry
4. Advantages and disadvantages of organic chemistry teaching method based on cloud classroom

After developing the cloud classroom, many people say that their cloud classroom will become a useless recreational learning software. It is true that this statement is wrong. However, in order to find out the truth, we should explore the advantages and disadvantages of cloud classroom teaching.

4.1. Advantages of cloud classroom teaching

The foundation of cloud classroom teaching is the establishment of computer network learning environment. There is no doubt that the offline teaching mode is a relatively intuitive teaching method. However, when an emergency occurs, it is difficult for many students to go to school. This situation will reflect the advantages of cloud classroom teaching. It does not limit the learning environment and place of students. Students can use electronic equipment to study knowledge anywhere. Students can choose their favorite subjects according to their different preferences to study happily. This way can improve students' interest in learning[4].

4.2. Disadvantages of cloud classroom teaching

We can't guarantee that every student has the ability of self-control. In the offline teaching mode, the face-to-face teaching of teachers and students can not only help students to learn knowledge, but also help teachers to supervise students' learning (see Table 2). However, the cloud classroom teaching method can not achieve the supervision of students' learning.

| Option     | Content                          |
|------------|----------------------------------|
| Advantage  | Subjective teaching              |
| Disadvantage | Lack of interest of students     |

Table 2. Advantages and disadvantages of online teaching

| Option     | Content                          |
|------------|----------------------------------|
| Advantage  | Whenever and wherever possible   |
| Disadvantage | Unable to supervise students    |

5. Research on the application of hybrid teaching mode based on cloud classroom in organic chemistry teaching of Higher Vocational Education

According to the above description, we can understand the advantages and disadvantages of offline teaching methods and online teaching methods. Although the offline teaching method is intuitive, it can not stimulate students' unique interest in learning[5]. Cloud classroom teaching can stimulate students' learning fun, but it can't supervise students' autonomous learning. Chemistry teaching is a complex process, we can not only use offline teaching mode or online teaching mode. This is unscientific[6].

This situation promotes the development of hybrid teaching mode. Hybrid teaching refers to the
combination of online teaching and offline teaching. Under the premise of realizing the advantages of cloud classroom teaching, we can completely abandon its shortcomings. We can use the advantages of offline teaching methods to cover up the defects of online teaching methods. This is the significance of blended teaching.

6. Conclusion

The emergence of the mixed teaching mode is an important sign of the reform of the educational field. According to the above description, we can find that the application of cloud classroom Hybrid Teaching in Organic Chemistry Teaching in higher vocational colleges will be a very successful decision.

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