

Research on the Application of Inquiry Teaching in Chemistry Teaching in Colleges and Universities

Xiaoping Zhang

Pingxiang Health Vocational College, Jiangxi, Pingxiang, 337000

key words Inquiry Teaching; Analytical Chemistry; classroom; experiment

Abstract In order to improve the efficiency of chemistry teaching in colleges and universities, we should first analyze the present situation of chemistry teaching in colleges and universities, and find out the problems still existing in chemistry teaching in colleges and universities. Only by solving these problems and mobilizing students' subjective initiative can we really improve the efficiency of chemistry teaching in colleges and universities. This paper mainly focuses on the application of inquiry teaching in chemistry teaching in colleges and universities, and also expounds the application of inquiry teaching in chemistry teaching in colleges and universities.

1. Introduction

Students' inquiry consciousness is closely related to the specific situation of students' participation in inquiry activities. If students get good experience in inquiry activities, then students' inquiry consciousness will be improved, but if students do not get good experience in inquiry activities, then students' inquiry consciousness will be weakened. Therefore, teachers should create a good inquiry environment for students, so that students in a good inquiry environment to get the transfer of subjective initiative, and in the process, students' autonomous learning ability can also be exercised. Inquiry teaching allows students to think about different possibilities and explore the ultimate problems themselves. The answer is that not only the students' ability to think can be improved, and the ability of the students to do so can also be improved. The teacher should guide the students to study according to their own thinking, because the excessive dependence on the teacher is not conducive to the future development and learning of the students. If the inquiry ability is mastered, the students can use their own research ability to study and understand different knowledge in the later study and development. The inquiry-type teaching method can play a considerable role in the chemistry teaching, but the role of the inquiry-based teaching method can play an important role, mainly to see how the teacher can use it.

2. The application of inquiry teaching in the course of chemical teaching

The chemical teaching has achieved good results so far, but there is a certain distance between the ideal chemical teaching effect and the distance, because there are still problems in the current chemistry teaching. The teaching methods of different teachers are different, and this can hinder the students' learning, because the students can adapt to the teaching methods of the teachers for a while, and even the students can't adapt to the teacher's teaching methods. In order to avoid this, the teacher should first stimulate the students' interest, and when the students are interested, the students will learn according to their own thinking. The teacher only needs to guide the students, the study behavior of the students is also dominated by themselves, and the natural students will not be influenced by the teaching methods of the teachers. In order to improve the interest of the students, the teacher can find the answer of the problem in the game through the way of the game. And when the students get the right answer, the student's sense of achievement can be born. The teacher should also give the students the appropriate encouragement, so that the students can make an in-depth exploration of the problem.

Inquiry teaching method can play a very important role in improving students' learning ability, because inquiry teaching method is to guide students to explore problems independently, learn and think on their own, so teachers should also adjust the teaching content according to students'

learning situation, so that the teaching content can be more in line with students' needs and students' learning law. In the face of the difficulties in the textbook, teachers should be more patient in teaching students, guide students to break through the difficulties step by step, and master the teaching content. Chemistry is actually related to our life, and teachers should make use of this connection to arouse students' attention. Intention also allows students to use chemistry to solve problems in life, to improve students' understanding of chemistry, and to encourage students to explore the teaching content constantly.

In addition, teachers should also motivate students, so that students can experience the fun of chemistry learning, to help students strengthen their understanding of chemistry. At the same time, teachers should also help students to develop good learning habits, because when students develop good learning habits, they do not need teacher supervision, students can also study independently, and good learning habits are of great help to students' future development. Teachers should not only praise students with good academic performance, teachers should also praise students who have made progress in their academic performance, so as to encourage students to continue to make progress and work hard.

To introduce inquiry teaching method into chemistry teaching classroom, only the efforts of teachers are not enough, and the cooperation of teachers and students is needed in order to give full play to the function of inquiry teaching method. In order to activate the classroom atmosphere, teachers can also give different cases, through these cases to arouse students' thinking, stimulate students' interest, so that students can explore the problem. And teachers can also use their own information technology application ability, through the Internet to let students know more about chemistry, attract students' attention. Classroom atmosphere is very critical to the effect of classroom teaching, because if the classroom atmosphere Students are reluctant to express their views in class, and if the classroom atmosphere is active, students' thinking will be more active.

3. The Analysis and Application of the Inquiry Teaching Strategies

3.1 develop students' interest in learning

Interest is the best teacher. When students are interested, students will naturally use their leisure time to understand and explore the relevant knowledge, and if students are not interested in this, then students are not willing to spend their own energy to study under the supervision of teachers. Inquiry teaching method can help students to interest in teaching content and take the initiative to explore it. At the same time, inquiry teaching method can also make students better understand the chemical phenomena in life, make students interested in chemistry, and willing to learn. When teachers are teaching chemistry, teachers can also use some multimedia teaching equipment to improve their learning. Students pay attention to the classroom, interact and communicate with students, and guide students to think about the problems. At the same time, the relevant cases cited by teachers in class should also be firmly related to the teaching content, which can deepen students' impression of teaching content and deepen students' understanding of teaching tasks.

3.2 improving students' inquiry ability in practice

In people's life, there are many phenomena related to chemical knowledge, and the teachers should guide the students to study the life and find out the phenomena related to the chemical knowledge. to strengthen the connection between the chemical knowledge and the life, to be able to arouse the enthusiasm of the students, and to be interested as the guide, the students can independently think about these phenomena, and the teachers can also collect the chemical phenomenon that the students see in the life of the students, and use the chemical phenomena as the subject of the discussion of the students, The students are given a deep analysis of these phenomena. In this way, the students' hands-on ability can also be improved.

3.3 deepen students' communication

In the process of teaching, in order to arouse students' thinking, teachers need to put forward

questions about a certain phenomenon, which must be representative and match with the teaching content. When students think about questions and get answers in many different ways, students are exploring this question. In this process, teachers should not affect students' thinking, but should give students some guidance at the right time. Even after the students answer the wrong answer, the teacher should not blame the students too much, because blaming the students will only dampen the students' interest in learning.

In order to improve the learning efficiency of students, teachers should teach according to students' learning laws, and at the same time, they can also choose appropriate teaching items as subjects for students to explore, which is very helpful to achieve the teaching objectives of chemistry teaching, and teachers can also see the characteristics of students' thinking through students' way of thinking. Then the teacher can carry on the targeted teaching to the student according to the student's thinking characteristic.

4. Conclusion:

In the process of chemistry teaching, inquiry teaching method can stimulate students' subjective initiative, exercise students' autonomous learning ability and thinking ability, and at the same time strengthen students' understanding of knowledge. In this process, teachers should fully respect the subject status of students, properly guide students, and give students more display space.

References:

- [1] some exploration and practice of analytical chemistry teaching reform in applied undergraduate colleges and universities [J]. Chen Jianxin. Guangzhou Chemical Industry. 2017 (07)
- [2] Exploration of analytical chemistry teaching reform oriented to engineering application [J]. Zhang Chunyan, Luo Jianxin, Zhang Ping, Li Aiyang. The exchange of scientific, educational, cultural and cultural resources (in the middle of the journal). 2016 (02)
- [3] Research on the reform of teaching content and curriculum system of analytical chemistry in colleges and universities [J]. Liu Pengyu. A guide to science and education (mid-term). 2016 (02)
- [4] Exploration on the Reform of Analytical Chemistry Teaching Based on Mu Class [J]. Xu Chunxuan, Tian Xian, Zhou Wenbo, Hu Shumin. Shandong Chemical Industry. 2016(09).
- [5] Research on analytical chemistry teaching method based on the goal of cultivating innovative talents [J]. Li Mei-mei, Yang Zaixing. Technical information. 2016 (02)
- [6] Application of Mind Map in Analytical Chemistry Teaching [J]. Yan Jun, Zhu Weiwei.