

# Exploring the Effective Ways of Life-oriented Chemistry Teaching in Senior Middle Schools in Viet Nam

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**ABSTRACT:** The basic concepts in the high school chemistry teaching process involve chemical experiments and chemical calculations. The scope of students' learning is very wide and difficult to learn. Under such circumstances, students need to understand the composition of knowledge in order to improve their chemistry literacy. In order to better strengthen the effectiveness of teaching in the teaching process, teachers can use life-oriented teaching methods to guide students in classroom learning, and focus on enhancing the effectiveness of classroom teaching, so that students can experience the value of chemistry teaching.

**KEYWORDS:** Chemistry Teaching Method; Chemistry Teaching Theory; High School Chemistry.

## I. INTRODUCTION

Basic concepts related to chemical experiments and chemical calculations in high school chemistry teaching. Students have a wide range of acquisitions and it is difficult to absorb them. In this case, students need to master the structure of knowledge to improve their academic literacy. In order to improve the teaching effect in the teaching process, teachers can use life-oriented teaching methods in the classroom to guide students' learning, focusing on improving the classroom teaching effect, so that students can learn more effectively. Experience the value of chemistry teaching.

## II. ANALYSIS OF THE NECESSITY OF LIVING TEACHING

### 1. Adopting life-oriented teaching strategies is conducive to students' interest in learning

There are many knowledge points in the process of high school chemistry teaching, and some chemistry frameworks need to be based on

experiments to understand the content. If only declarative teaching methods or rote memorization methods are used, students will be disgusted. Part of There is no way to solve the problem. Most students put in time and energy but did not get a good learning effect. On this basis, teachers can use life-oriented teaching methods to stimulate students' interest in learning, and make students' cognition of chemistry life-oriented more clear. High school students already have a certain amount of life experience, so the combination of knowledge and life experience can stimulate students' imagination, and also enable students to understand relevant knowledge and master the focus of the subject.

### 2. Living in high school chemistry teaching is conducive to the explanation of teachers' knowledge

Senior high school chemistry is a subject that cultivates students' exploratory and practical skills, and requires students to explore and draw conclusions in experiments. However, some teachers nowadays ignore the importance of experiments. In class, they pay attention to the explanation and derivation of theories. Students cannot fully understand some of the abstract knowledge. The inability to understand the experimental principles during the exam leads to the failure of the whole question to calculate the result. In addition, some schools have outdated laboratory equipment and some chemical agents have failed. The classroom effect is poor when doing experiments, misleading students' thinking, and even some schools do not offer experimental classes at all. This makes students have poor hands-on skills and are not interested in finding answers through experiments on their own. It even solidifies students' thinking and cannot predict the multiple results of complex reactions when doing questions.

### **3. Students' neglect of chemistry subjects**

High school chemistry occupies a relatively small proportion of the college entrance examination papers, which makes some students focus on language, mathematics, foreign language and other major subjects, and do not pay much attention to the study of chemistry. The learning attitude of students directly determines the effect of learning. Students' neglect of chemistry learning leads to more and more loopholes in the chemistry discipline of students. In the end, even if they want to make up for it, it will be more difficult.

## **III. TARGETED STRATEGIES FOR HIGH SCHOOL CHEMISTRY TEACHING**

### **1. Teachers change teaching concepts and let students become the main body of the classroom**

Teachers should change their teaching concepts, let themselves act as guides, helpers, and facilitators in the classroom, hand the classroom to the students, and let the students become the main body of the classroom. On the one hand, it can stimulate students' interest in learning, and there will be no sleepiness, lack of concentration, and brain failure; on the other hand, let students become the main body of the classroom, and it can also increase students' classroom participation and receive good results. Classroom effect. For example, teachers can ask more questions to give students a direction for thinking, and guide students to understand and use knowledge points; they can set up some reasoning games and let students participate in groups. In the course of the competition, teachers can not only see the proficiency of students in mastering knowledge points, but also improve students' classroom participation and enhance students' interest in chemistry classrooms.

### **2. Pay attention to experimental teaching**

Experimental teaching is to let students do experiments to verify their hypotheses. During the experiment, not only can the students' exploration ability be exercised, but also the students' practical ability and innovative thinking can be exercised. Moreover, there are always successes and failures in experiments. We can draw conclusions from successful experiments and learn from the lessons of failure. Schools should update chemical experiment equipment and chemical agents in a timely manner to prevent misleading students or danger during classroom experiments if they fail to achieve the original effect when used in class. Teachers should pay attention to the novelty of

experiments when setting up experiments. They should not copy old and outdated experiments. Students should be exposed to new experiments, conform to the requirements of the new curriculum reform, and cultivate students' reaction ability, overall planning ability and innovation. Thinking makes the chemistry class full of challenges, rather than simple experiments that people can see through at a glance.

### **3. Using multimedia to teach high school chemistry**

Teachers can use multimedia to stimulate the brain with visual and auditory sensations. At the same time, they can also use pictures and pictures to give people an intuitive feeling. Moreover, high school chemistry has many teaching tasks that require experiments. Not all experiments can achieve the expected results, and some experiments are dangerous. Teachers can use multimedia to play videos of successful experiments, so that students can intuitively and vividly see the changes in the medicament during the experiment, the changes in the reaction products during the experiment, etc.; they can also use multimedia to show some chemical equipment, chemical substances, and chemical element movements. And so on, you can also use multimedia to make some exquisite courseware to attract students' attention. This can not only achieve the classroom goals and effects, but also mobilize students' learning enthusiasm, stimulate their interest in learning, form learning initiative, and truly fall in love with chemistry classrooms.

### **4. Check students in time and check classroom efficiency through feedback**

Teachers should check the classroom efficiency of students in time. There are teachers' guidance and reminders from other students in the classroom, which is not the true level of students. Only during the test, the students are in a state of independent thinking, analyze and synthesize some knowledge points by themselves, and the final test results obtained can reflect the true level of the students. Through testing and getting feedback from students, teachers can see the classroom efficiency of students and their mastery of knowledge points, so as to provide a reference for the preparation of the next class.

## **IV. CONCLUSION**

Under the new curriculum reform, although high school chemistry has many problems and faces many challenges, we must actively explore effective teaching methods, correct our deficiencies in the teaching process, learn from the

successful experience of some excellent teachers, and let our own Classroom becomes efficient. Teachers should pay attention to putting students in a dominant position in the classroom. They are only guides and students are participants. It is necessary to change one's own teaching methods, mobilize students' enthusiasm as much as possible, stimulate their interest in learning, let students change from passive learning to active learning, and form the habit of active learning. At the same time, we should also pay attention to the connection between the various knowledge points of chemistry and the performance and application of chemistry knowledge in daily life, and pay attention to the application of the chemistry knowledge learned by students.

### REFERENCES

- [1]. Chien Hoang Thi, (2013). High School Chemistry Experiment Course. Published by the Ministry of Education of Vietnam.
- [2]. Cuong Nguyen, (2007). University and high school chemistry teaching methods-some basic issues. Published by the Ministry of Education of Vietnam.
- [3]. Nham Hoang, (2000). Inorganic Chemistry-Volume 1. Vietnam Education Press.
- [4]. Nham Hoang, (2000). Inorganic Chemistry-Volume 2, 3. Vietnam Education Press.
- [5]. Oanh Dang Thi, Suu Nguyen Thi, (2014). High School Chemistry Teaching Method. Vietnam Normal University Press.
- [6]. Quang Nguyen Ngoc, (1994). Chemistry Teaching Theory. Headquarters of Education Office in Hanoi, Vietnam.
- [7]. Rang Do Dinh, Dinh Nguyen Huu, et al, (2006). Organic Chemistry-Volume 1. Vietnam Education Press.
- [8]. Rang Do Dinh, Dinh Nguyen Huu, et al, (2008). Organic Chemistry-Volume 2. Vietnam Education Press.
- [9]. Vietnam Ministry of Education Press, (2018). Chemistry-High School Education Course. <https://data.moet.gov.vn/index.php/s/iiCh4ymI9vd9RP1#pdfviewer>.