

Exploration on the Reform of Ideological and Political Teaching of Environmental Chemistry Course

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Abstract: To carry out curriculum ideological and political education is to thoroughly implement the whole staff, the whole process, and all-round education. Taking the environmental chemistry course as an example, it introduces the feasibility of developing ideological and political education, and analyzes how to realize the integration of environmental chemistry courses and ideological and political education from the aspects of changing concepts, carefully designing teaching content, and playing the role of training courses and experimental courses. Integration has achieved certain results, providing reference and reference for environmental majors to carry out related courses ideological and political education.

Keywords: Ideological and political course; Environmental chemistry Teaching reform

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1 Introduction

Environmental chemistry is a basic course for environmental science and environmental engineering majors, as well as a core course for chemistry, resources, and agriculture majors, with a wide range of teaching. Actively promoting the ideological and political construction of the environmental chemistry curriculum is of great significance for achieving high-quality training of talents from both professional education and ideological and political education. This article combines the teaching situation of environmental chemistry course in environmental major of Yili Normal University to discuss how

to carry out the reform of ideological and political education of professional courses in order to realize the goal of ideological and political education in environmental major.

2 The feasibility of ideological courses of environmental chemistry major

Environmental chemistry is a basic theoretical course that has emerged under the circumstances that modern environmental problems have become increasingly serious and have attracted the attention of people from all over the world. The main content is to explain the chemical pollution and its influence involved in the migration and transformation of pollutants in various environmental media and organisms from the perspective of the strategic thinking of sustainable development. The course content mainly involves atmospheric environmental chemistry, water environmental chemistry, soil environmental chemistry, the migration and transformation and effects of pollutants in organisms, the basic principles and applications of green chemistry, and the exploration of environmental quality restoration and control methods^[1]. From teaching objectives to teaching content, the course closely follows the development needs of the new era, and docks ecological civilization construction, environmental protection policies, and food security. It contains rich ideological and political education elements, which can not only impart professional knowledge, but also cultivate students' social responsibility and ideological and political awareness. And it can facilitate the development of "ideological and political" teaching reform.

3 Ideological and political reform practice of environmental chemistry curriculum

3.1 Raising awareness and changing ideas

To carry out ideological and political education in professional courses, teachers must first change their understanding, and follow the rule of ideological and political work, the law of teaching and educating people, and the law of student growth. Then they should establish a sense of responsibility and mission to foster morality. Therefore, teachers of professional courses should improve their own quality, adhere to the guiding position of Marxism in the field of ideology, and strengthen the teaching and research of ideological and moral cultivation. Secondly, we must follow the principles of the integration of humanities and natural sciences, and the combination of explicit education and implicit education, to reflect the silent and subtle effect of moisturizing things^[2]. When teaching environmental chemistry content, the teaching should be invisible, rather than simply teaching professional knowledge. The core of the concept of green development is the harmonious coexistence of man and nature. It is a sublimation of human understanding of the relationship between man and nature for thousands of years, and is the inheritance and innovation of Marxist green development concept^[3]. People's understanding of environmental issues is also a dynamic process, and students must be guided to view issues in real life and to adhere to the perspective of development, so as to keep pace with the times.

3.2 Giving full play to the advantages of the curriculum and carefully designing the teaching content

When teaching the theoretical content of environmental chemistry, it is necessary to pay attention to the diversification of the form and the enrichment of the content. It is necessary to be connected with the current major policies of the country. For example, the author added a special class "Beautiful Yili" before teaching environmental and ecological issues. By introducing the special geographical location of Ili Kazakh Autonomous Prefecture, the humid climate different from other regions in Xinjiang, the biodiversity of Yili and its role in the "Belt and Road Initiative". The important position in "", inspires students' love for their

hometown and the motherland; when teaching terrain inversion, the combination of Ili's topography and the winter air quality is worse than other seasons, which will deepen their understanding of "shape inversion and air The understanding of the "quality impact" knowledge points can also guide them to use the knowledge they have learned to build their hometowns and serve their hometowns after graduation, and help them establish a scientific world view and a life view of serving the people; when teaching soil pollution issues, combine current hot issues. For example, food safety issues caused by heavy metal pollution in the soil, so that students have a deep understanding of the serious consequences of environmental pollution and the necessity of environmental protection, and enhance students' sense of social responsibility; for example, when explaining homework, everyone will only copy the contents of the original copy. The answer extended to the students' lack of initiative in learning, and the learning was inadequate. Everyone should take the initiative to think when doing homework, and summarize the content of the teacher's explanation and the knowledge in the book in their own words. In the future, we must also actively think about and sum up work experience so that I can grow up quickly. For example, increase classroom discussion, guide students to independently think about the current development background of environmental chemistry in my country, what problems there are, and future development ideas, deepen students' understanding of the curriculum, and enhance their learning direction.

3.3 Giving full play to the positive role of in-class training courses

Practical teaching is an important way to cultivate students' application ability, problem analysis and problem solving ability, and it is an indispensable important link in the education process^[4]. As an applied undergraduate college, some basic courses of our major are equipped with in-class training sessions. In the environmental chemistry training course, the author combined the current environmental situation and the instructions of the new general secretary on waste classification, and asked the students to use "Ili Normal University Campus Noise Monitoring and Evaluation", "Questionnaire Survey on Domestic Waste Classification in Colleges and Universities", and "College Students Investigation and research

on ecological civilization awareness and behavior" and other topics are carried out. This year, the theme "Beautiful China, I am an actor" on the 6th Five-Year Environment Day will be produced with the purpose of "arousing the environmental awareness of every student in our school". In the micro video, everyone showed the group's whimsy and beautiful campus in the video. These practical activities not only consolidate the knowledge they have learned, but also give full play to their professional characteristics, helping students to establish and practice the concept that clear water and green mountains are mountains of gold and silver. At the same time, the content is closely related to students' daily lives, which stimulate their interest in learning and enhance their sense of gain. During the data collection period, the students' independent thinking and independent learning ability, rigorous learning style and teamwork ability were exercised. In addition, we selected the best micro-videos and uploaded them on the WeChat official account of the Youth League Committee of the school, which not only make our profession more famous and enable students to be proud of themselves, but also made full use of the school's cultural platform to stimulate students' love for their alma mater.

3.4 Actively playing the role of environmental chemistry experiment courses

At the beginning of the semester, we have conducted experimental safety education and added relevant case introductions, such as laboratory safety accidents in colleges and universities in recent years. And we used audio materials to improve students' awareness of danger and safety. In the professional experiment, we increased the content-related scientific research knowledge and scientific research stories, and share the spirit of the scientists in the relevant scientific research stories to improve students' thinking of applying what they have learned and working hard for professional development. For example, academician Hou Guangjiong, a soil scientist, often contacted farmers during his studies and learned that soil salinization has led to extremely low agricultural production and farmers' lives are very poor. This inspired him to resolve to rely on science and develop agriculture to alleviate the country's poverty and backwardness. He went deep into the countryside for a long time, created a set of agricultural soil research

methods, and made pioneering contributions to the development of soil science in my country^[5]. So we will carry out innovative experiments to cultivate students' ability to think and learn independently, and cultivate their rigorous learning style and teamwork ability. For example, a group of 3 to 5 students are given a theme. Through the division of labor, they consult literature to establish the research direction and content of their group, and develop a detailed experimental plan. Apart from that, exchange activities can also be carried out between each group to expand students' thinking. During the experiment, the teams can also help each other to solve the problems encountered.

3.5 Changing assessment methods

First, we change the proportion of final exam results and usual results from the current 7:3 to 5:5, ideologically stimulating the enthusiasm of students to think and study independently. Secondly, the assessment of students is comprehensively evaluated from what they say and do. For example, the classroom performance, mental outlook, attendance rate, collective consciousness and cooperative spirit in the experiment and training links are used as comprehensive indicators to assess students' final performance. Subjective questions related to ecological civilization construction and sustainable development are added to the final exam to examine students' flexible use of theoretical knowledge and their sense of mission and social responsibility to the country.

3.6 Results of the reform

The purpose of ideological and political education is to implement the fundamental task of cultivating morality, guiding students to establish a correct outlook on life, values and world, and helping students to enhance their self-esteem. Through the practice of ideological and political education reform, we first discovered that students' learning enthusiasm and independent thinking ability in the classroom have been improved. The classroom atmosphere has become better, and the mental outlook has been renewed. The phenomenon of being late, absent, entering and leaving the classroom during lectures has decreased, and the phenomenon of sleeping and whispering in class has been almost eliminated. At the same time, homework and experiment reports

were submitted in a timely manner to complete the quality improvement. The mid-term and final exam results have improved significantly. Secondly, in the process of experiment and training, especially when collecting water samples outdoors, everyone actively cooperated, and the teamwork ability was enhanced; students participated independently, which improved their hands-on ability and interest in learning, and at the same time exercised their ability to comprehensively apply their knowledge to solve problems. After the class, the author randomly selected some students to ask about the effects of the reform of the ideological and political teaching of the course. The students' responses were positive. They liked this infiltration education method and improved their initiative in ideological and political and professional knowledge learning. At the same time, they gradually developed a good habit of keeping abreast of the country's major policies and policies, as well as reading and reading more, and their knowledge further expanded. Established confidence in the development prospects of the environmental profession, some students actively prepare for the postgraduate exams, hoping to further study. Practice shows that students are affirmed of the ideals and beliefs, socialist core values and ecological civilization ideas advocated in the teaching of environmental chemistry courses, and the reform has achieved certain results.

4 Conclusion

Ideology and politics curriculum is an inevitable trend

and important content for colleges and universities to implement the fundamental task of cultivating people under the new situation, and it is an important starting point for achieving education from all aspects in colleges and universities. Environmental chemistry courses contain rich elements of ideological and political education, and they must assume the role of the main position. As a professional course teacher, you must deeply participate in the reform of curriculum ideological and political education, continuously improve your own ideological and political quality, and at the same time enrich and develop classroom teaching in the new era, constantly try and innovate in teaching practice, and improve the effect of education to contribute to the cultivation of comprehensive elites in our country.

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