

Discussion of the Teaching Reform About the Curriculum Ideology and Politics in Science Major in Universities Based on Zoology

Yinghui Sun¹, Chenchen Sun², Qiangcheng Zeng¹, Juan Liu¹

¹College of Life Sciences, ²College of Medicine and Nursing, Dezhou University, Dezhou, Shandong, 253023, China

Abstract: This paper carries out the reform of ideological and political education in science majors in colleges and universities from the following three aspects: question inquiry before class, creation of learning situations, classroom group reports, and practical guidance, so as to achieve the goal of truly teaching and educating people, implement the development of moral education, and cultivate special high-tech talents with excellent moral quality.

Keywords: Science Major; Curriculum ideology and politics; Teaching reform

Fund Project: 2021 Dezhou University School-level Teaching Reform Project (dzums21-39, dzuzd21-03)

1. Introduction

One of the topics that the universities of our country must pay attention to in the new period is how to establish moral character and cultivate people and train the socialist builders and successors effectively in the practice of running and managing the school and teaching and educating people. And implement the course ideological instruction spirit, top priority is to realize this topic, so we must make good use of the main channel of classroom teaching, and full of all kinds of courses including mining ideological education resources, make all kinds of professional course to walk with the direction of ideological and political theory, form a synergistic effect. The construction of “curriculum ideological and political education” in colleges and universities not only reflects the concept of “big ideological and political education”, but also becomes an important starting point for the effectiveness of ideological and political education in colleges and universities.^[1] For science and engineering students who usually pay too much attention to technology, it is particularly important to strengthen ideological and political education, so it is urgent to find out the powerful persuasive and infectious power of the coordinated development of curriculum and ideological and political education.^[2]

2. Necessity

Compared with the phenomenon that science and engineering courses only pay attention to professional learning and ignore ideological education in the past, the reform of “curriculum ideological and political” is the general trend. Therefore, it is necessary to enhance the awareness of education and build batches of “red and positive” high-quality teacher teams to sublimate the new thought and spirit of socialism with Chinese characteristics in professional teaching. Lead the students to seek the mystery of knowledge, cultivate good three perspectives, take the right value-led integration road, and realize the “Chinese Dream” as soon as possible.

The new teaching mode under the background of ideological and political education in professional courses designed by professional course teachers can not only improve students’ mastery of professional knowledge, but also further reflect students’ satisfaction with ideological and political education in professional courses and the improvement of moral standards, improve students’ moral quality and innovation ability, cultivate batches of characteristic technical talents for the country.

3. The exploration process of ideological and political implementation teaching model

This topic adopts the practice inquiry method, adheres to the basic principle of educating people by virtue in the reconstruction of the teaching mode of cooperation between specialized courses and ideological and political courses, adheres to the unchanged nature

of science and technology, and explores the moral education resources of this course, as well as the ethics, value and scientific spirit of science and technology. Through pre-class question exploration; Create learning situation and report to class group; Practice guidance of the three-step strategy, establish a teaching model in which students are the main body of classroom learning and teachers give full play to their leading role in teaching and educating people. Combined with the classroom teaching practice of a semester, make an overall evaluation of the classroom atmosphere and the improvement of students' learning ability and ideology, and then apply it to the teaching of other specialized courses of science and engineering. Give play to students become the main class performance, create a democratic and harmonious classroom atmosphere.

3.1 Design the ideological and political objectives of the course

Realize the combination of knowledge imparting and education to achieve the goal of all-round education.

Pay attention to the combination of knowledge imparting and mainstream value guidance, give play to the role of hidden education of professional courses.

Improve students' moral standards and cultivate students' scientific feelings.

Fully excavate the moral connotation of the course, integrate the value and significance of life into the course.

3.2 The entry point of ideological and political education

“Running ideological and political work through the whole process of education and teaching is the requirement for colleges to follow the law of ideological and political work, the law of teaching and educating people, and the law of students' growth.”^[3] In the course of ideological and political education of science and engineering majors in colleges and universities, the teaching model of PBL (Problem-Based Learning) and the teaching model of flipped classroom based on MOOCS can be combined to realize the innovation of ideological and political courses. On the premise of completing the classroom tasks, we should take the problem inquiry as the guidance, realize the all-round education with students as the main body, and let students cultivate virtue and cognition of core values in the process of independent learning.

3.2.1 Pre-class question exploration

Teachers set questions online, and let students consult and collect data through the network or books, and then analyze and solve problems. In this autonomous learning process, students can also consciously cultivate their own moral sentiments and scientific cognition, and further enhance their own scientific feelings. For example, students can explore the problem of “why wild animal resources are decreasing”. Through consulting materials, students can clearly understand the reasons for the gradual decrease of national wild animal resources, and realize that they should love nature, protect nature, imperceptibly enhance the awareness of environmental protection, and strengthen self-cultivation.

3.2.2 Create learning situation and report to class group

Divide students into different study groups to discuss and debate a certain problem of the course, send a group member to make a summary report, and other students ask and debate the problem. The group members must answer the questions raised. Finally, the teacher made comments on each group from the perspective of value guidance, so as to timely correct the biased values in the students' reports, stimulate and strengthen the students' cognitive motivation, improve the students' learning initiative, understand the students' existing knowledge, ideological trends and scientific values, and purposely instill values to achieve the ideological and political goals.

3.2.3 Practice guidance

To achieve the goal of all-round education, teachers can not do without the guidance of students' after-school practice. While giving full play to the role of the main channel of the first classroom, we should also constantly strengthen the role of the second classroom in education.^[4] For example, in the process of animal experimental anatomy, it is inevitable to encounter difficulties such as blood sickness or fear of dissection for some students. At this time, teachers need to comfort students with blood sickness, give specific guidance, tell them that the experiment safety and body first, and master the anatomy method; Communicate with students who are afraid of anatomy, give students a correct concept of scientific research, encourage students to understand that scientific research has sacrifices.

4. Break through problems

4.1 Ideological and political education in Science and technology courses

Professional teachers are directly responsible for carrying out ideological and political thinking in professional courses.^[5] Therefore, during the construction and reform of the teaching model of “ideological and political thinking in curriculum”. When giving play to the implicit education function of ideology and politics, the performance of science and engineering majors should be kept unchanged, so that students can establish the concept of “technology is always human”. For example, in the teaching of Darwin's

“natural selection, survival of the fittest” animal evolution and development process, it can be properly connected with the real competition of social life, encourage students to learn professional knowledge, master the necessary skills, and become a valuable person.

4.2 Teaching knowledge deviates from the focus of the classroom

In the reform of “curriculum ideological and political thinking” of the major of science and engineering, it is easy to make a lot of ideological and political supplement to a certain knowledge point and deviate from the focus of the class. In this regard, in order to effectively carry out classroom teaching, we can introduce examples and guide at the same time. For example, when teaching the phylum Platyhelminthes in the course of Zoology, a micro-video about *Taenia solium* is played to induce students to discuss and communicate with each other about the shape and general organization of the tapeworm in groups. The teacher will make a supplement and introduce one or two safety examples to ensure their own safety and improve the rigor of the experiment, so that they can naturally enter into the study and thinking of the whole Platyhelminthes.

5. Conclusion

The ideological and political curriculum not only supplements the original college content, improves the curriculum system and greatly improves the classroom quality, but also provides an important guarantee for training qualified builders and reliable successors of socialism with Chinese characteristics in the new era. Through the use of ideological and political teaching mode, the curriculum and ideological and political education are effectively combined to achieve the goal of “classroom ideological and political education” for science and engineering majors, enhance the interest in learning and scientific research, cultivate the students’ ability to explore independently, and help cultivate characteristic professional high-tech talents with excellent moral quality.

References:

- [1] Wang Shi, Tian Hongfang. Exploration and Practice of “Curriculum Ideological and Political” Construction in Higher Vocational Education [J]. *China Vocational and Technical Education*, 2018 (14): 15-18.
- [2] Gao Xiwen. Research on the ideological and political work model of college curriculum based on collaborative education [J]. *School Party Building and Ideological Education*, 2017 (12): 6-18.
- [3] Zheng Yongting. Some Thoughts on Putting Ideological and Political Work in Colleges and Universities through the Whole Process of Education and Teaching [J]. *Ideological and theoretical education*, 2017 (1): 4-9.
- [4] Li Qianghua. Discussion on the Teaching Reform of Ideological and Political Courses in Colleges and Universities -- Taking the “Public Ethics” Course as an Example [J]. *Journal of Ningbo Institute of Education*, 2018, 10 (5): 51-54.
- [5] Ma Liang, Gu Xiaoying, Li Wei. Practice and Reflection on Professional Teachers’ Ideological and Political Construction of Curriculum from the Perspective of Collaborative Education [J]. *Heilongjiang Higher Education Research*, 2019 (1): 125-128.

About the Author:

Yinghui Sun (1986.07), female, Han, Shandong Jinan, Dezhou 253023, China

I graduated from Nankai University with a PhD degree and majored in Zoology. My research direction is Zoology.