

The Current Situation and Exploration of Curriculum Ideology and Politics

—— Take "Electrician and Electronic Technology" as an Example

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Abstract. This paper first uses the concept of curriculum ideology and politics as well as its construction status as the starting point, explaining the importance of further strengthening the college ideological and political work, especially the curriculum ideology and politics. Then take the course of "Electrician and Electronic Technology" as an example to explore the design, research and implementation of the curriculum ideology and politics. On the basis of correctly understanding the connotation of curriculum ideology and politics, the teaching goals is remodeled and teaching design is innovated through structuring the specific material library about the curriculum content and the ideological and political elements. Not only let students gain knowledge and ability, but also cultivate their own conduct. So the students will realize the comprehensive improvement of knowledge level, practical ability and characteristic literacy.

Keywords: Curriculum ideology and politics; ideology and politics elements; electrician and electronic technology; moral education work.

1. Introduction

In the 2016 National College Ideological and Political Work Conference, General Secretary Xi Jinping pointed out that the necessity and importance of college ideological and political work in the college, which raised the college ideological and political work to a new height. Ideological and political work is the lifeline of various tasks of colleges and universities, and it is also where it has a distinctive socialist advantage in running a school. Only by doing good ideological and political work can we solve the several fundamental issues about what kind of people who cultivate in colleges and universities, how to cultivate people, and for whom to train people. [1] We must insist on taking foster character and civic virtue as the central link of education, and taking the ideological and political work throughout the entire process of education and teaching, realizing the educating people for whole process and comprehensively. A new situation in the development of my country's higher education is created industriously. [2] To achieve this goal, curriculum ideology and politics is an important part of them.

Curriculum ideology and politics means a teaching model that professional knowledge, ideological and political education will be organically combined to enhance students' the literacy for ideological and moral and social responsibility, to cultivate students' patriotism, and let students mould the correct world view, outlook on life and values in ordinary not ideological and political lessons class classroom teaching through reasonably selection and use of teaching content and teaching methods. It is not simply conducting ideological and political education in a certain course or a few courses, but to penetrate this work into all courses and embodying in the entire process of education and teaching. It requires that teachers should pay attention to cultivating students' independent thinking ability, practical use ability, and innovative spirit during teaching in each course. They should allow students to pay attention to social problems and national development while learning professional knowledge, and form the correct political theory and way of thinking. At the same time, through various teaching activities such as case research, classroom discussion, comparative analysis, etc., students are used to guide students to proceed value analysis and opinion

expression. By moulding students' criticism and analysis of thinking and social responsibility, the talents to need for social development and national construction is cultivated

2. The concept and construction status of curriculum ideology and politics

2.1 The concept of curriculum ideology and politics

The concept of curriculum ideology and politics and ideological and political courses is different, and the latter refers to courses such as "Introduction to the Basic Principles of Marxism", "Introduction to Mao Zedong Thought and Socialism with Chinese Characteristics" and "Ideological Moral Cultivation and Legal Basis". The curriculum ideology and politics refers to a teaching model that professional knowledge, ideological and political education will be organically combined to enhance students' the literacy for ideological and moral and social responsibility, to cultivate students' patriotism, and let students mould the correct world view, outlook on life and values in ordinary not ideological and political lessons class classroom teaching through reasonably selection and use of teaching content and teaching methods.

The Ministry of Education has tied the curriculum ideology and politics and ideological and political courses, as an important way for foster character and civic virtue in the college. The implementation of curriculum ideology and politics is not to carry out empty political propaganda, it is to improve students' ideological and moral cultivation, and it is also the requirement and only way to train socialist builders and successors with all-round development of morality, intelligence, body, beauty and labor. Give full play to the role of curriculum ideology and politics, and moisten things silently integrate ideological and political education into the teaching of each course, which can better cultivate and enhance students' ideological and moral literacy, patriotic feelings, and social responsibility.

2.2 Construction status of curriculum ideology and politics

At present, some progress has been made in the exploration and implementation of curriculum ideology and politics in colleges and universities at all levels in China, and there are quite a number of articles and topics on the construction path of curriculum ideology and politics and teaching team construction, but there are still some challenges and problems in the implementation.

Some teachers confuse the concepts of curriculum ideology and politics with that of ideological and political curriculum. They simply believe that curriculum ideology and politics is a replacement or infinite expansion of the ideological and political curriculum, or they believe that curriculum ideology and politics is a simple copy or random mixture of the ideological and political courses. [3] The ideological and political courses is always the main position of systematic ideological and political work education to students., and curriculum ideology and politics is a new battlefield to further shape the moral conduct of students. Curriculum ideology and politics is by no means a substitute for ideological and political courses. It is not that the status and influence of the ideological and political curriculum will be weakened after having the curriculum ideological and political. On the contrary, we must continue to play the core role of ideological and political curriculum. Curriculum ideology and politics is not the infinite expansion of ideological and political courses [4]. Its role is to further optimize and improve the effect of ideological and political courses. It is to organically integrate ideological and political content with professional knowledge, and to effectively influence students, rather than simply increase the class hours of ideological and political courses and the knowledge points for ideological and political curriculum were broken and kneaded directly into other courses. Curriculum ideology and politics is not a simple copy of ideological and political courses. Some college directly let the teachers of ideological and political courses take the choice of the content for curriculum ideological and politics. This is to turn other courses into a copy of ideological and political courses and to mix and match professional courses with ideological and political courses at will. This method cannot

organize professional knowledge and the elements of ideological and political into a whole. Instead, it is prone to many problems such as "false emptiness" and content fragmentation

Secondly, there are also some teachers who have a deviation understanding of the curriculum ideology and politics. It is believed that the elements of ideological politics will affect the teaching quality of the original professional content. At the same time, it will also make the course boring and boring, and there is a psychological resistance to the curriculum ideology and politics. This understanding is obviously wrong. The existence of the elements of the curriculum ideology and politics is not a reversal of the order of host and guest, seize the space of the original teaching content, but to cooperate with the original professional content and jointly play a role in cultivating students' all-round development. This requires that ideological and political education cannot be moved to the classroom stiffly, but to effectively penetrate the original teaching content. It can not only stimulate the ideological and political elements from the original teaching content, but also introduce current affairs news and integrate it with the original teaching content. The addition of ideological and political elements should be conducive to professional knowledge learning. For example, engineering students should focus on cultivating their rigorous and standardized operations, fair and objective thinking, and willing to contribute and willing to ordinary craftsman spirit. The ideological and political education to them can not only shape their character, but also exercise their rigorous thinking in their majors, and play a role in kill two birds with one stone.

In addition, there are also some problem of objective operations. Some colleges have split ideology and politics and curriculum content when they conduct curriculum ideology and politics. [5]In each class will spend a few minutes on the ideological and political content in addition to professional knowledge, and rigidly build the class into a mode of ideological and political elements+professional content. This method is difficult to integrate the two together, and it is easy to arouse students' aversion. There are also teachers have insufficient excavation when choosing curriculum ideology and politics, and insufficient refining. Therefore, the problem of hard-to-match the elements of ideological politics and professional knowledge makes the ideological and political elements like "oil floating in water", and does not form the effect of "salt in soup" with professional knowledge.

3. Research and Implementation of "Electrician and Electronic Technology" curriculum ideology and politics

Electrician and electronic technology is a professional basic course for non-electrical students. It provides students with basic knowledge and skills to understand and master electrical and electronic systems, including circuit principles, electronic devices, digital and analog circuit design, electrical control and other aspects. These knowledges are of great significance to the operation and application of students in actual engineering, which can cultivate students' hands-on ability, and lays a solid foundation for students' future learning and career development. As a professional basic course for non-electrical students, most of the engineering students must study the course. Therefore, studying the "Electrician and Electronic Technology" curriculum ideology and politics are of great significance for cultivating students' professional ethics and craftsmanship.

3.1 Correctly understanding the connotation of curriculum ideology and politics

Teachers are not only the organizers of teaching, but also the guides of students' learning. Only by fully understanding the connotation of curriculum ideology and politics can we better all-round train of students. Teachers must first fully recognize that curriculum ideology and politics are an important means for strengthen moral education and cultivate people in colleges. We should attach importance to curriculum ideology and politics from the depth of thought, and take the initiative to tap relevant elements combining it with professional content.

The content of each course has its own unique style and professional characteristics, and there are also different occupational requirements for students of different majors. As students who study

the course for "Electrician and Electronics Technology", most of them are engineering students. They are required to have rigorous and standardized operating standards, objective and fair thinking models, and professionalism who dare to endure hardships and dedication. This requires teachers to have targetedly incorporated these occupation requirements into the curriculum design in the process of teaching this course, incorporating ideological and political goals into the course teaching goals, penetrating the ideological and political elements to the teaching process, and cultivating high-quality talents who meet the professional needs [6]. At the same time, teachers must also focus on cultivating students' safety awareness and cooperation awareness because of professional characteristics. On the basis of ensuring professional content teaching, the course should cultivate students' patriotic feelings and promote the spirit of work hard and dare to dedicate. The engineering talents that work hard for the strong country of science and technology are cultivated combining the goals of Industry 4.0 and Chinese manufacturing 2025.

3.2 Construct the material library of the curriculum content and the ideological and political elements corresponding

The content of "Electrician and Electronics Technology" contains rich and different categories of ideological and political elements. Teachers must scientifically condense the ideological and political elements contained in the professional knowledge and stimulating their vitality. At the same time, we should also pay attention to current events, constantly update and adjust the ideological and political elements library, add new living water to it, and maintain the vitality of the material library. The light-controlled alarm in linear amplifier circuit of analog signal is taken as an example. Hereinafter has built the relevant course knowledge points and its corresponding material library:

(1) Partial voltage effect and calculation of photoresistor. Playing the State Grid promotional video "The Hope of the Night-What we can do with 1 KWH of electricity", students' awareness of energy conservation are cultivated. Let the students understand the country's strategic goal of "carbon neutrality" and think about how to achieve energy saving and emission reduction in daily life and future production practice. The greater the resistance, the greater the partial voltage, the greater the capacity, the greater the responsibility. Students' spirit of dare to undertake and contribute are cultivated.

(2) Triode current distribution relationship and the characteristics of small current control large current, small signal control large signal. Through the characteristics of triode small signal control large signal, students understand the truth of "four ounces dial a thousand pounds", and can bring great impact to the system by changing or controlling some small links in production practice.

(3) Principle and characteristics of triode multistage amplifier circuit. Multistage amplifier circuit is divided into input stage, intermediate stage and output stage. The role of the input stage is to increase the input resistance of the amplifier circuit, the role of the intermediate stage is to amplify the voltage, and the role of the output stage is to reduce the output resistance. Through the indispensable role of each level of the amplifier circuit in the triode multistage amplifier circuit, students understand the importance of cooperation between various departments and everyone in the team, and cultivate the spirit of cooperation among students.

(4) Master the basic operation of domestic EDA (Li Chuang) software. By comparing the gap between domestic EDA and international EDA software, students can understand the power of science and technology, set lofty goals, and work hard for Industry 4.0 and Made in China 2025.

3.3 Reshape the teaching goals and innovate teaching design

After the introduction of curriculum ideology and politics, it will inevitably have related influence on the original curriculum teaching. Teachers first need to reshape their teaching goals. A class is no longer only about knowledge and ability goals, but also about improving students' quality goals. While teaching knowledge, students are guided to form a complete and correct three views, and are cultivated students' hard work style. Innovating teaching design under the guidance

of new teaching goals, which include the choice and application of teaching content and teaching methods, and new evaluation methods and so on [7].

For the teaching content, we must dig the ideological and political elements of original professional knowledge, and introduce new elements at the same time. For example, when explaining the transmission and distribution line, we can introduce my country's high-voltage and ultra-high -voltage AC power transmission technology located in the world's leading position, thus stimulating students' self-confidence and national pride and stimulating students to study hard through relevant engineering cases. When teaching integrated circuits, students can understand the truth of science and technology power by allowing them to discuss incidents such as the United States' supply of Huawei chip. Key technology can only be break hard through ourselves and can't rely on others. Students' awareness of safety and danger is cultivated and working for the goal of national science and technology revitalization.

Rich teaching means can help the implementation of curriculum ideology and politics. For example, online-offline hybrid teaching models extend traditional classrooms through the development of information technology, and use platforms to record students' learning trajectory, and can also feedback issues and results in real time to cultivate students' spirit of excellence. Various virtual software simulation operations have expanded students' practical platforms, enhanced students' hands-on ability, visualized abstract problems, and helped students understand experimental principles and methods. Through the method of flipped classroom, students' self-learning ability and independent thinking ability have been exercised. The students are allowed to feel the practical difficulties that may face the future career path in advance and to find how to solve it. Through the project-based team cooperation model, students' division of labor and cooperation and teamwork can be cultivated.

After the introduction of curriculum ideology and politics, students' learning effects can be also detected through new evaluation methods. For example, we can take the work order as a carrier, adopt the whole process evaluation and multiple evaluation to evaluate the learning effect of students. In the task evaluation, whether to arrive late and leave early can be a benchmark of whether to arrive and leave work on time, a statement of responsibility is required when receiving or returning the experimental equipment to cultivate students' careful and rigorous work attitude. Whether the students can complete the work assigned by the group according to the requirements in the task amount to whether the students are competent for the task of the company.

4. Summary

Curriculum ideology and politics is designed to truly cultivate students in all directions. They can not only gain knowledge and ability, but also their own character are cultivated. Students' personal development is not only concerned, but also cultivate their sense of responsibility for society. Colleges should adhere to the education for the party, education for the country. Only by strengthening the construction of curriculum ideology and politics, teaching professional knowledge and achieve value leadership, allowing it to have a collaborative effect with ideological and political courses, the students can realize the comprehensive improvement of knowledge, practical ability, and characteristic literacy, and become the talents need for the times.

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