

The Construction and Exploration of Ideology and Politics of Electric Power System Course under the New Engineering Mode

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Abstract: Combined with the "14th Five-Year Plan" of national intelligent manufacturing, taking the teaching of electrical engineering and automation as an example, the thinking element is integrated into the classroom teaching of professional courses. The whole process makes full use of the guiding and heuristic teaching methods and means, and embodies the student-centered education and teaching concept. Based on the three characteristics of knowledge transfer, ability cultivation and spirit shaping in the course design of electrical specialty, the ideological and political construction framework of core specialized courses is constructed in combination with the teaching process.

1. Introduction

In the face of the rapidly developing economic situation, China has comprehensively promoted reform and innovation in technological level, industrial scale and development mode. China has implemented a series of promoting strategic measures, such as "Made in China 2025", "Innovation-driven development", "Internet Plus" and "One Belt and One Road". In the new engineering model, it is necessary to further promote the construction of professional curriculum group, and the core of the construction of professional group is to build a curriculum system based on professional group, and the construction of curriculum group, which is far more complex than the curriculum construction of a single major[1]. In recent years, many colleges and universities have made useful exploration on the construction of curriculum group based on specialty group, but a mature curriculum system framework has not been formed yet, and all colleges and universities are exploring. In order to promote the construction of specialty group, it is necessary to study the construction of specialty group curriculum system. It is also necessary to integrate ideology and politics with curriculum[2].

2. Reform Objectives

Curriculum is the element of major, and major is the structured aggregation of several courses. The curriculum system refers to the different structure formed by the different order of different courses in the same major. The curriculum architecture plays a very important role in higher

education courses, because the order of curriculum categories determines what kind of knowledge and ability structure students will acquire through learning. Based on the in-depth understanding of the construction background of "new engineering", the course group of electrical engineering and automation major is determined according to the talent training scheme of electrical engineering and automation major in our university[3].

The power system courses of Electrical Engineering and automation major in our school mainly include the following courses: power electronic technology, electrical machinery, electrical engineering, power system analysis, and electrical part of power plant. Power system courses are shown in Figure 1.

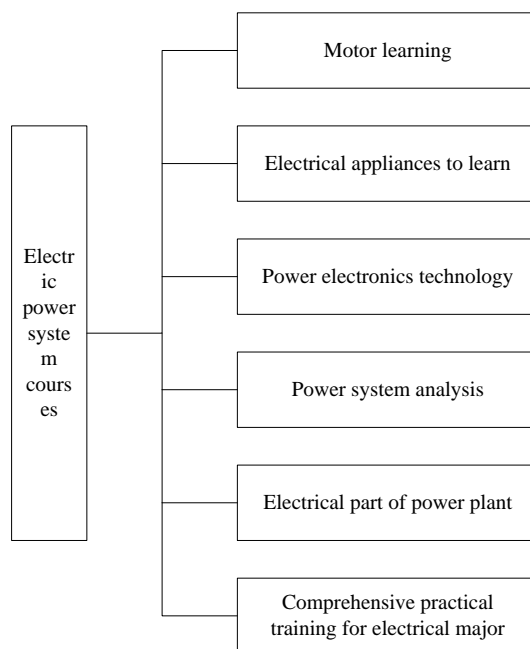


Figure 1: Courses included in the power system class

Our school electrical engineering and automation major, power system curriculum group output, mainly substation/plant electrical design, at present, each curriculum group is independent of each other. In the face of the rapidly developing economic situation, China has comprehensively promoted reform and innovation in technological level, industrial scale and development mode. China has implemented a series of promoting strategic measures, such as "Made in China 2025", "Innovation-driven development", "Internet Plus" and "One Belt and One Road". Under the new engineering mode, it is necessary to transform, deepen, transform and renew the traditional engineering specialty on the basis of the original. The major of electrical engineering and automation has to face the problem of how to realize the stock renewal in today's rapid development of information technology[4]. This requires us to break down the barriers between courses and realize the mutual benefit of courses.

There is an inseparable connection between each curriculum and the ideological and political aspects of the curriculum.

No matter which curriculum group can be integrated into the ideological and political elements of the curriculum, through the transfer of knowledge, training ability and shaping spirit to achieve the purpose of preaching, teaching, clarifying doubts, and educating people[5].

Efforts should be made to guide students to be firm in their ideals and beliefs. In the course design, the characteristics of power system courses should be combined with "Chinese policies". Through the comparison of the history, current situation and prospect of the development of relevant technologies, students are trained to grasp the opportunities of the national development

strategy, so that they can establish the common ideal and firm belief of realizing the great rejuvenation of the Chinese nation. Furthermore, students' confidence in the path, theory, system and culture of socialism with Chinese characteristics can be enhanced through the "Chinese standard" and "Chinese creation" of electric power technology.

Efforts should be made to guide students to cultivate patriotic feelings. In the course design, the electrical engineering major should be based on the horizontal and vertical comparison with the international advanced technology, from the comparison to see the advantages, deficiencies, clear direction, guide the students to patriotic feelings as their own motivation for continuous struggle, connect the personal future with the development of the motherland, achieve the purpose of enhancing the students' political awareness, overall situation awareness, core awareness and alignment consciousness.

Efforts should be made to guide students to strengthen their moral cultivation. In the design of the course project, while ensuring the improvement of students' professional skills and knowledge, it is more important to instill correct ideological and moral concepts and help students establish a correct outlook on life. Through the introduction and analysis of the deeds of experts in the field of electrical engineering and current affairs in the electrical direction, students can deeply realize the great love and great German feelings of the example. Only with moral integrity and all-round development can we meet the requirements of the new era and become the leader of the great rejuvenation of the Chinese nation

Efforts should be made to guide students to increase their knowledge and knowledge. In the course teaching design, the core purpose should be to increase students' knowledge and knowledge, stimulate students' thirst for professional knowledge and love for knowledge reasoning, and lay a good foundation for personal development. At the same time, in the Internet era where knowledge is being updated so quickly, it is necessary to train students with the spirit of waiting for no one, help students optimize their own knowledge system, expand their horizons, improve the pattern, and enhance students' "four consciousness".

Efforts should be made to guide students to cultivate the spirit of struggle. In the course design, the national spirit of struggle reflected in the electrical field is fully explored, and students are guided to associate personal development with professional exploration and national rejuvenation, stimulate students' "Chinese dream", and cultivate students' national spirit of unremitting struggle for youth, dream and country.

Efforts should be made to guide students to enhance their comprehensive literacy. The improvement of comprehensive quality not only affects the depth and breadth of individual development, but also concerns the long-term goal of all-round development of people. Therefore, in the course teaching design, it is necessary to combine theory with practice, cultivate students' ability of comprehending and innovating, cultivate students' scientific research quality of using human text and paying attention to ethics, and make students become all-round talents.

3. Reform Measures

Philosophy practice is the core of "curriculum ideological and political", moral education is the root of "curriculum ideological and political", and full education is the guarantee of "curriculum ideological and political". It is very necessary to integrate ideological and political requirements into engineering courses to achieve the purpose of both teaching and educating people. We should work hard to guide students to firm their ideals and beliefs. In the course design, the characteristics of electric power system courses should be combined with "Chinese policy". By comparing the history, present situation and prospect of the relevant technology development, the students should be cultivated to grasp the opportunity of the national development strategy, so as to establish the

common ideal and firm belief of realizing the great rejuvenation of the Chinese nation. Furthermore, through the "Chinese standard" and "Chinese creation" of electric power technology, students' confidence in the socialist path, theory, system and culture with Chinese characteristics will be enhanced.

We should work hard to guide students to cultivate patriotic feelings. Curriculum design, which is based on electrical engineering, compared with international advanced technology of transverse and longitudinal, seen from the comparison advantage, to find and clear direction, guides the student to use patriotism as unceasingly self's motivity of struggling or the man will be personal prospects associated with development of the motherland, to enhance students' political consciousness, overall situation consciousness, core and aligning with the purpose of.

To guide the students to strengthen the moral accomplishment. Course project design, in the guarantee of enhancing students' professional skills and knowledge accomplishment at the same time, more to instill correct moral concept, help students set up the correct outlook on life, and through expert deeds and electrical direction in the field of electrical engineering introduction and analysis of current event hot spot, let the students deep understanding to the example of a teacher big big love feelings. Only by improving our moral character and developing in an all-round way can we meet the requirements of the new era and undertake the great task of national rejuvenation When a person.

We should work hard to guide students to increase their knowledge and experience. In the course teaching design, the core purpose should be to increase students' knowledge and insight, stimulate students' thirst for professional knowledge, love for knowledge reasoning, and lay a good foundation for personal development. At the same time, in the Internet era where knowledge is updated so fast, it is necessary to train students with the spirit of waiting for no one, help students optimize their own knowledge system, expand their horizons, improve the pattern, and then enhance the "four consciousness" of students.

To guide students to cultivate the spirit of struggle. In the course design, the national struggle spirit reflected in the electrical field is fully explored, and students are guided to closely associate personal development with professional exploration and national rejuvenation, stimulate students' "Chinese dream", and cultivate students' national spirit of unremitting struggle for youth, dream and country.

We should guide students to enhance their comprehensive literacy. The improvement of comprehensive quality not only affects the depth and breadth of individual development, but also affects the long-term goal of all-round development. Therefore, the teaching design of the course should combine theory with practice, cultivate students' ability of comprehending and bringing forth the new through the old, cultivate students' scientific research accomplishment with human text and attach importance to ethics, and make students become all-round talents.

The above six ideological and political requirements point out the direction for the ideological and political construction of professional courses. Through the integration of the above elements in the teaching process, the ideological and political education system of the electrical specialty course is constructed, and the ability and spirit are cultivated while the knowledge is transmitted, so as to achieve the purpose of both teaching and educating people.

3.1. Integrate Ideological and Political Education into Professional Curriculum Evaluation

It makes a breakthrough from the knowledge points of the past skills, makes a systematic evaluation of the overall learning effect of the students, integrates the relevant "curriculum ideology and politics" with the course evaluation, and makes the overall focus of "curriculum ideology and politics" be placed on the overall development of the students' own political and ideological quality,

and guides the students to gradually form the correct values, outlook on life and world outlook. To form a more healthy scientific belief and professional ethics and good behavior habits. In general, curriculum ideological and political education involves the evaluation of will, emotion, attitude and other aspects.

In the reform of the main electrical courses, the concept of "curriculum ideological and political thinking" shows the ability of rigorous innovation, teamwork and safe electricity use in the students' own assessment and evaluation. The main electrical courses are a major part of the electrical students' learning, but also a front for the implementation of ideological and political education. The combination of ideological and political education with the teaching of electrical main courses can cultivate students' good professional ethics, which is also an important factor affecting the quality of talent training. The course of Electrical Engineering takes advantage of its own teaching characteristics and content, so teachers need to evaluate students more actively. For example, the teacher can reserve homework in the classroom, let the students to collect and organize research data related to our country automatic control, so as to write a study of automatic control related research status, and as the course achievements into the course assessment results, through this process can enable the students to feel the development of technology in our country, At the same time, it also makes students realize the superiority of the socialist system.

3.2. Change the Teaching Concept of Professional Teachers

Han Yu, a great educator in ancient China, once put forward that a teacher should preach, teach and solve doubts. The "Tao" in this sentence mainly refers to human norms, life attitudes and moral concepts, which is the ideological and political education proposed by the society at the present stage. However, many colleges and universities have professional ideological and political teachers, so that many teachers of specialized courses naturally believe that the teaching content of specialized courses is more focused on professional knowledge, which is what Han Yu said. Therefore, ideological and political education should also be implemented in the main courses of students' major. As a school teacher of specialized courses, I should have a deep understanding of ideological and political education in terms of my own thoughts, which is not only the responsibility of ideological and political teachers, but also the responsibility of some specialized courses teachers themselves. In the process of professional teaching, if the content of current politics can be infiltrated from a professional perspective, it will not only invigorate the classroom atmosphere, but also avoid the mode of simple preaching in ideological and political class. In this way, students may be more interested and easier to accept. To improve the ideological and political level of professional teachers, it is necessary to rely on excellent teaching staff to achieve successful training of talents. This major not only requires teachers of specialized courses to have high academic level, but also requires teachers of specialized courses to have certain ideological and political education level and ability.

3.3. Integrate the Content of "Curriculum Ideology and Politics" into the Teaching Materials of Professional Courses

In the electrical core course, there are many courses related to our equipment manufacturing industry, numerical control system and artificial intelligence. For example, "Power electronics technology", "Electrical machinery", "Electrical science" and other courses. The level of these technologies can reflect the ability of our country to innovate in science and technology. When introducing these technologies in the past teaching period, our country has been leading the whole world in many aspects of technology. So in the process of introducing the relevant professional technology, we should make a prominent explanation on the advanced technical conditions.

In order to achieve the overall goal of ideological and political teaching, teachers need to write the teaching methods and ideological and political contents into the teaching plan in detail. For example, in the course of "Electrical Appliances", the students are presented with pictures of objects, excerpts of network news and cutting-edge videos of the industry, and the course content is described in detail by combining science and technology to rejuvenate the country through visual impact, so that the ideological and political ideas of the course can be gradually put into practice. Therefore, it is necessary to collect a lot of information before class, and find out the implementation of ideological and political education. After sorting out relevant classroom teaching contents, I will write all the contents into the teaching plan and finally present them in class. Through the teaching practice, students respond very well, the enthusiasm of students to study is fully mobilized, and they can participate in the teaching discussion more actively.

4. Conclusion

Curriculum ideology and politics can not be mechanically copied, nor far-fetched. Ideological and political courses are not simply and directly transferred to the teaching of professional courses, but "guided by the situation, along with the situation" naturally integrated. Curriculum and ideological politics are not the addition of physics, but the reaction of chemistry. There are "ideological and political content" in the course, students do not feel abrupt; There are "ideological and political flavor" in the course, but students are not "didactic sense", because of emotional resonance, and students naturally accept, play "moisten things silently", the effect of imperceptible.

Course education requires university teachers in-depth research, accurately grasp the students' ideological dynamic, from students' thoughts, social hot spots, the international and domestic situation and realistic problems, professional import ideological content, finely crafted, do fine, stationary material combined with impromptu material, the case of "horizon" and "side" of the story, interesting and timeliness, Video, pictures, text, teaching a variety of ways "penetration", curriculum and ideological and political seamless connection, clever integration, not only to enrich the classroom content, but also active classroom atmosphere, improve the quality of education.

Philosophy practice is the core of "curriculum ideological and political", moral cultivation is the foundation of "curriculum ideological and political", and the guarantee of "curriculum ideological and political" is full staff education. It is very necessary to integrate the requirements of curriculum ideological and political in engineering courses to realize the purpose of teaching and educating people.

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