

Research on Civic Teaching Methods in Organic Integration Course of Auto Body Manufacturing Processes

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Abstract: Automobile body manufacturing process is a major course in vehicle engineering, and the teaching process is mainly based on the explanation of professional knowledge, but lacks the content to enhance students' cultural confidence and political identity. This study determines "inherit the craftsmanship spirit, help to make a strong country" as the goal of the course, taps and enriches the civics elements of the course, organically integrates textbook knowledge and curriculum civics as a whole, synergistically promotes the students' deepening of ideological understanding. It also gradually enhances the values and improves the teaching ability and level of young teachers. At the same time, a three-dimensional evaluation system of "long cycle and multi-dimension" is constructed to form a closed-loop system and continuously optimize the effect of curriculum reform.

1. The necessity of curriculum ideology and politics in professional teaching

President Xi Jinping emphasized at the national conference on ideological and political work in colleges and universities that it is necessary to insist on making the cultivation of morality and nurture of people as the central link, and to carry out ideological and political work throughout the whole process of education and teaching to realize the whole process of educating people and all-around cultivation of people. Teaching reform with the goal of "curriculum ideology and politics" is not only a return to the teaching essence of "teaching and educating people", but also a response to the fundamental questions of what, how, and for whom higher education under the leadership of the Party is to cultivate people [1-3]. Fully understanding the key connotation of "curriculum politics", grasping the value implication, and actively exploring the implementation path will help our "curriculum politics" to reflect the educational objectives, play the role of teachers, and focus on students' attention. The purpose of the course of thought and politics is to realize the same direction of all kinds of courses and ideological and political theory courses, to realize the synergistic cultivation of people [4].

2. The problem of teaching course ideological and political theory

The new period of new requirements for institutions of higher education to cultivate talents not only includes professional quality, but also ideological and political quality, professional quality and professional skills are closely related to the ideological and political quality is directly related to the construction of socialism with Chinese characteristics, whether there is a solid guarantee of talent ^[5,6]. Although many colleges and universities have begun to incorporate the ideological and political aspects of the curriculum into their daily teaching activities, there are still many problems, which are summarized in the following three aspects.

First, at present, in this group of college students, there are still problems such as weak ideological cognition, lack of national honor and national pride, which not only affects the cultivation of professional qualities, but also affects the sense of responsibility to take up the national mission in the future; it is very important for students to build a solid ideological defense, resist the harm of various erroneous thoughts and remarks, and help college students to improve their ideological and political awareness, which is very important for establishing the correct three concepts. It is very important.

Secondly, although colleges and universities have carried out corresponding exploration and implementation for the integration of curriculum ideology and politics and professional education, due to the uneven understanding of curriculum ideology and politics by college teachers, the reality of college education still exists that curriculum ideology and politics and professional education are cut off from each other, divided or even antagonistic ^[7]. For the teaching of vehicle engineering disciplines, how to adjust the educational institutions to realize the multiple organic unity of knowledge transfer, value leadership and ability cultivation; how to deepen the reform of the curriculum objectives, content, structure, mode and other aspects of the ideological and political education oriented to political identity, national consciousness, cultural self-confidence, personality development and other ideological and political education orientation and the teaching of knowledge and skills inherent in the various types of courses, and to promote the freedom of the students to comprehensive development, these are the urgent needs of the students. These are problems that need to be solved urgently.

Thirdly, there is a lack of an effective evaluation system for the organic integration of the ideological and political education of the courses and the education of specialized courses. Only by establishing a comprehensive and objective evaluation system can we accurately find out the problems and deficiencies in the process of integrating curriculum Civics and politics and professional education in a timely manner, and then push forward the curriculum reform in a firm direction. At the same time, high-quality curriculum reform can promote a more perfect evaluation system.

Automobile Body Manufacturing Process” is one of the major professional courses in our college, and the teaching process of this course is mainly based on the explanation of professional knowledge, and there is room for further improvement of the teaching effect. How to realize the double improvement of students' “professional skills + comprehensive quality” and the growth of young teachers themselves through the integration of professional knowledge and course ideology has become an urgent problem. This project will dig deep into the “auto body manufacturing process” course in favor of students to enhance political identity and cultural self-confidence in the content of the lecture, and the organic integration with the course of ideology and politics to form a synergistic effect; to promote the deepening of students' ideological understanding, values and gradually improve; to enhance the teaching ability and level of young teachers.

3. Teaching Exploration of Organic Integration of Professional Education and Course Civics and Politics

3.1 Enhancement of the teaching team's civic-political ability

Teaching team course teachers clarify their role and responsibility as the theme of human education^[8], pay attention to current affairs and politics, strengthen the study of ideology and politics, and continue to improve the level of self-ideology and politics; study the “great power”, “great power craftsmen” and other documentaries, and explore the course-related ideological elements; visit the research area of the relevant enterprises to understand the development of the enterprise industry; observe and learn from the results of excellent university team course ideology and politics, and improve the quality of teaching. Study the documentary films such as “Great Powers” and “National Craftsmen” to explore the elements of ideology and politics related to the course; visit and research the related enterprises in the region to understand the development of the enterprise industry; observe and learn from the results of the ideology and politics of the course of the team of excellent colleges and universities to improve the teaching ability of the team.

3.2 Course Civic and Political Objectives and Content Creation

The course “Auto Body Manufacturing Process” serves the production and manufacturing of vehicles, and determines “inheriting craftsmanship, helping to make a strong country” as the course objective, integrates the course ideology with the cultivation of specialists, and serves the regional industry and local economy.

This course combines the development trend of intelligent manufacturing industry and the demand of talents, conforms to the wave of the great outbreak of China's automobile industry, under the target of “inheriting craftsmanship and helping to make a strong country”, combines the production, learning and research and internship bases in and out of the province and relies on the platform of the Provincial Key Laboratory of Agricultural Machinery of the College, revises the syllabus, upgrades and optimizes teaching methods, creates new teaching contents, and creates new teaching contents and new teaching methods. Upgrade and optimize the teaching methods and create new teaching contents. We change “teaching-centered” to “learning-centered”, applying the methods of argumentation, analytical-guided teaching, multi-level open seminar, progressive practical teaching, etc., to cultivate students' ideals and social responsibilities, improve students' analytical ability, practical ability and higher-order thinking, and promote in-depth study of agricultural machinery. ability and higher-order thinking, and promote deep learning. In the process of teaching Civics and Politics, teachers and students participate together, teachers combine the content of the course, students think about the relevant issues, ignite students' self-realization needs, and stimulate students' learning initiative. The teaching reform team has optimized the design of Civics and Politics teaching reform plan and content of this course, as shown in Table 1.

Table 1: List of preliminary design of Civics teaching in the course of “Automobile Body Manufacturing Process”.

Chapter	Implementation method	Civic-political elements
1:Introduction	Integrate the development history of China's automobile with the development history of automobile at home and abroad; focus on introducing and analyse China's leading position in the world in the field of new energy automobile; introduce the function, composition and manufacturing process of car body.	(1) Superiority of the socialist system (2) National Sentiment (3) National pride
2:Basic Theory of Stamping Process	The basic theory of metal plastic forming will be interspersed with the applicant's research results related to the content of this chapter during his doctoral program; the latest research developments in related fields in China will be introduced; and the importance of rigorous scientific research attitudes and scientific and technological productivity will be infiltrated.	(1) Craftsmanship Spirit of Science (2) Scientific and technological development is the first productive force
3:Overview of Stamping Process	Introducing the concept of stamping, introducing the common processes of stamping; illustrating them with specific examples of stamping production in domestic aviation, navigation and aerospace fields; introducing the history and achievements of domestic enterprises such as Yizhong in developing the world's leading press equipment, highlighting the importance of scientific and technological development to the development of the country.	(1) Craftsmanship (2) Great Power of Science and Technology (3) National Pride
4:Stamping Process of Body Covering Parts	Combining different automobile brands in China, including Dongfeng, BYD, Great Wall, Geely, etc., and covering different models, including cars, trucks, agricultural machinery and other body covering parts, to explain the corresponding stamping process. It enables students to strengthen the scientific spirit and explore innovative thinking while mastering the specific stamping process.	(1) Intelligent Manufacturing (2) Scientific Spirit (3) Creative thinking
5:Automobile body assembly welding process	Combine the content and practice process of students' metalworking internship to explain the concept of welding process. Combine the specific welding process of body covering parts and structural parts of our car enterprises to explain the welding process and fixture. Introduce the development and overseas acquisition of welding robots of our enterprises.	(1) Linking theory to practice (2) Working spirit (3) Dialectical thinking (4) Sense of national honor
6:Automobile Body Painting Process	Combine the painting process of Red Flag automobile to explain the concept of automobile body painting. In the process of explaining the body coating and the specific coating process, add the sustainable development concept of “green water and green mountains are golden silver mountains”.	(1) Sustainable Development (2) Green Environment (3) Self-learning

3.3 Construction of the evaluation system of course civic politics

The organic integration of course civics and professional skills is to take the knowledge and skills

in the course of “Auto Body Manufacturing Process” as the carrier, to provide students with value leadership and civic armament, to realize the “organic integration and dual-drive co-progress” of knowledge and skills and civic values, and to achieve the goal of “Inheriting the spirit of craftsmanship and helping to make a strong country”. To achieve the goal of “inheriting the spirit of craftsmanship and helping to make a strong country”.

The course evaluation system is often a difficult point in the evaluation of the effectiveness of education reform^[9]. The traditional course evaluation system is flat and simple, relying only on the usual attendance and final theoretical examination results for evaluation, lack of guidance and supervision in the process, lack of multi-dimensional and long-cycle feedback mechanism, the results of the course assessment are unsatisfactory, and are not conducive to the long-term improvement and continuous optimization of the course education reform. On the one hand, this project prolongs the monitoring cycle of the evaluation system of course ideology and politics, not only focusing on the quality supervision of the implementation process of education reform, but also investigating the follow-up course counter; on the other hand, it collects the comments on course ideology and politics from multi-dimensions, including teachers, students, industry-university-research bases and employers; and then builds a three-dimensional evaluation system of “long-cycle, multi-dimension” to help the curriculum and education reform. Teaching and learning reform.

4. Conclusion

Combined with the requirements of the objective situation in the new period, this project takes the initiative to make the teaching content of “Automobile Body Manufacturing Process” and the ideology and politics of the course go in the same direction to form a synergistic effect, so as to achieve teaching reform results in various aspects.

In terms of teacher training, teachers can change the thinking and pattern of traditional teaching, dig deep into the content of the taught subjects that is conducive to students' enhancement of political identity and cultural self-confidence, explore the nurturing elements contained in the taught courses, look for their fit with the combination of knowledge points, organically incorporate these elements into the taught points of knowledge, and realize the ideological leadership in education and teaching of students. In the education and teaching of the students, we can realize ideological leadership and promote the deepening of students' ideological understanding and the gradual enhancement of their values.

In terms of students' cultivation objectives, students should master the professional power that can be used to stand in the fierce competition, but also to let students have a good character, to become a comprehensive talent of moral integrity and all-round development; to recognize the close dependence between personal growth and national development, and to make clear what the core values are; to combine scientific practice and achievement with life goals and value realization; to bear in mind who cultivates them and who they are working for, and to do a good job as qualified builders for the cause of socialism with Chinese characteristics. The students will be qualified builders and reliable successors of the cause of socialism with Chinese characteristics.

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