## Teaching Exploration and Practice of New Energy Vehicle Technology Specialty in Higher Vocational Colleges from the Perspective of Course Ideological Politics

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**Abstract**: Higher vocational colleges shoulder the historical responsibility of cultivating high-quality talents with virtue plus ability. As a vocational educator, we must remember the original intention and mission of "educating people for the party and the country." Taking the core course of new energy vehicle technology in higher vocational colleges as an example, ideological and political resources is excavated and merged into specialized course teaching by combining job position, teaching exploration and practice of new energy vehicle technology specialty in higher vocational colleges from the perspective of course ideological politics is discussed in this article.

Keywords: higher vocational colleges; course ideological politics; new energy vehicle; technology; teaching exploration and practice

#### **1. INTRODUCTION**

In order to fully implementing the Party 's education policy, fully implementing the fundamental task of morality education, and cultivating socialist builders and successors with all-round development of morality, intelligence, physical fitness, aesthetics and labor, colleges and universities have carried out the reform of course ideological and political teaching, excavated the ideological and political resources of relevant specialized course as much as possible, integrated the ideological and political elements into the teaching of specialized course, and realized the fundamental goal of moral education. Therefore, this article takes the specialized course of new energy vehicle technology as an example to introduce the exploration and practice of ' Course Ideological Politics ' in the teaching of specialized course.

### 2. THE NECESSITY OF IMPLEMENTING "COURSE IDEOLOGICAL POLITICS " IN THE NEW ENERGY VEHICLE TECHNOLGY

Due to the influence of traditional education concept, the teachers of specialized course in higher vocational colleges do not have a good understanding of course ideological politics, which leads to the disconnection between ideological political education and professional education. As an important institution to impart professional and technical vocational skills, higher vocational colleges should deepen the teaching reform of specialized course while cultivating students ' high-quality vocational skills, and implement ideological and political work in the process of education and teaching, so as to truly realize the fundamental goal of moral education.

### 2.1 Specialized Courses are an Important Part of the Talent Training System

In the course system of talent training system, the credits of specialized basic courses, specialized core courses and specialized restricted courses occupy a considerable part of the credits required by students, and this is also an important way for students to master vocational skills at school. Therefore, the teachers who undertake the teaching of specialized course are also an important group of students who have long contact time and many communication opportunities during the school period, and they are easier to understand the students' ideological trends. Many professional norms, professional standards, laws and regulations, teamwork, communication and other ideological and political elements of the major can be involved in the specialized course, ideological and political teaching is integrated into specialized course, professional teachers can play a greater role in their own advantages. Through the teaching of specialized course, students ' resistance can be effectively resolved, and it is easier to be accepted by students.

# **2.2** The Quality Objective Is an Important Part of Talent Training Objective

In talent training objective, in addition to the necessary professional basic knowledge and ability methods, the cultivation of quality objectives is also indispensable. It is necessary to cultivate students ' basic ideological and political quality, professional quality, humanistic quality, scientific quality and physical and mental quality, and the all-round development of morality, intelligence, physique, beauty and labor is truly realized.

### 2.3 The Professional Development Puts Forward Higher Requirements for Ideological and Political Education

At present, a new round of scientific and technological revolution and industrial transformation in the world is booming the integration of related technologies in the fields of vehicle and energy, transportation, information and communication is accelerating. Electrification, networking and intelligence have become the development trend of the vehicle industry, the new energy vehicles have become the main direction of the transformation of the global vehicle industry and an important engine to promote the sustained growth of the world economy.

With the rapid development of the new energy vehicle industry, the demand for new energy vehicle graduates will gradually increase in the future. At present, most colleges and universities are oriented to the cultivation of students ' employability, coupled with the influence of self-media such as network network-enabled Informatization, which makes most students have problems such as lack of professional ethics, poor ability to resist pressure, deviation of values, and eagerness for quick success and instant benefits. The reduction of graduates ' professional quality and social recognition will inevitably affect the development of the major.

### 3. THE EXPLORATION AND PRACTICE OF COURSE IDEOLOGICAL POLITICS TEACHING OF NEW ENERGY VEHICLE SPECIALTY COURSES IN HIGHER VOCATIONAL COLLEGES

# **3.1** Change the Concept and Overall Design

The strategic requirements such as ' actively and steadily promote carbon peak carbon neutralization and ' further promote the energy revolution ' have a positive role in promoting the development of new energy vehicles, strengthening the supply chain of the new vehicle industry and creating a new ecology of the industrial chain. It will bring new vitality to the development of the new vehicle industry, at the same time the confidence of talents to choose the vehicle industry and cultivate the vehicle industry is strengthened, and the confidence of the industry is enhanced. As new energy vehicle industry of the nation is entering a new stage of accelerated development, how to cultivate more high-quality technical and skilled talents and how to solve the contradiction between the increasing demand for market talents and the current graduates ' professional ability and quality that cannot meet the needs of the market has become the top priority of the reform of talent training mode in most colleges and universities. The specialized core courses of new energy vehicle technology in higher vocational

colleges should proceed from reality, ideological and political resources in the overall design of teaching, course teaching and assessment are excavated, and are optimized into course standards, teaching plans, teaching design schemes, teaching process and evaluation, and students' vocational skills and professional qualities is cultivated in a subtle way in the form students' like.

### **3.2** Combined with the Characteristics of the Course Content and Explore the Integration of Ideological and Political Elements

As the organizer and leader of teaching activities, teachers should strengthen their own moral learning, constantly improve their own ideological and political quality, pay attention to and collect relevant ideological and political topics and resources in real time which will be integrated into classroom teaching. The advantage of specialized course is that they can integrate many ideological and political elements into knowledge points and skill points. Through the teaching of knowledge and skills, students' professional ability of team communication and cooperation, the ingenuity spirit of truthseeking and refine on , suffering consciousness , responsibility bearing and patriotism education that does not forget the original mission can be cultivated.

# **3.3** Changing Teaching Methods, Scientific Guidance Is the Key

Most of the contents of specialized course in higher vocational colleges are related to the occupation or position of students' graduation, which is very attractive to students. There is a difference between the course ideological politics and the traditional ideological and political course. It is not a new course but that which include the theory of socialism with Chinese characteristics, professional ethics, professional quality and other ideological and political contents will be introduced in specialized course, at the same time, and ideological and political education for students is carried out, so that students will not be as boring as pure ideological and political courses when learning, they will be willing to accept, and students ' resistance will be reduced.

# **3.4 Multivariate Evaluation and the Implementation of Timeliness**

The teaching effect of any course depends on the evaluation. Therefore, the content of ideological and political assessment should be involved in the assessment of specialized course. The course assessment of new energy vehicle technology adopts the combination of process assessment, final paper assessment and operation assessment. The assessment of ideological and political content is run through the process of assessment., in addition to examining the students ' mastery of basic knowledge and skills, professional norms and professional qualities such as operation standardization and tool use can also be evaluated, so as to show the ideological and political attributes of the assessment method. International Journal of Science and Engineering Applications Volume 14-Issue 04, 05 – 07, 2025, ISSN:- 2319 - 7560 DOI: 10.7753/IJSEA1404.1002

#### 4. CONCLUSION

Course ideological politics is the important way to realize ideological and political education in the current education pattern of new energy vehicle technology specialty course teaching in higher vocational colleges, it is also an innovative way to cultivate new high-quality skilled talents in vehicle specialty in higher vocational colleges. In the process of education and teaching, college teachers should integrate values into the teaching of professional knowledge and the cultivation of professional skills, specialized course should be fully discussed, appropriate ideological and political elements should be integrated according to the characteristics of the course, education and teaching methods should be constantly improved, the role of the main position of classroom teaching should be played. While improving students' professional quality, they should help students establish a correct world outlook, outlook on life and values, and constantly improve students' ideological level, political consciousness, moral quality and cultural literacy, so that students can become talents with both ability and political integrity and all-round development.

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#### 6. REFERENCES

[1] Wang Jing. Research on the path of course ideological and political construction of new energy vehicle specialized course, Times Automobile, 2023(6), 51-53.

- [2] Xu Jing. Exploration and Practice of " Course Ideological Politics" in Automobile Specialty of Higher Vocational Colleges, Automotive Maintenance and Repair, 2019 (11), 16-18.
- [3] Xiao Xinglong. The exploration and practice of Course Ideological Politics under the pattern of ' great ideological and political ', Ideological and political education research, 2018 (10), 133-135.
- [4] Zu bubo, Liu Tao, Sun Shaojie, Chang Baoli. The exploration and practice of integrating ideological and political elements into higher vocational professional courses-Taking the course of " power battery and management system " as an example, Shanxi Education (Higher Education), 2022 (09), 80-82.
- [5] Li, X., & Chen, H. Integrating Socialist Core Values into Automotive Engineering Curriculum: A Case Study of New Energy Vehicle Programs in Chinese Universities. Journal of Engineering Education, 111(3), 589-605.
- [6] Zhang, Y., et al. Pedagogical Innovations in New Energy Vehicle Education: Embedding Sustainability Literacy in Technical Training. IEEE Transactions on Education, 64(4), 412-420.
- [7] Wang, Q., & Schmidt, M. Curriculum Ideological and Political Education in Vocational Programs: A Comparative Study Between Chinese and German Automotive Training Systems. International Journal of Educational Development, 98, 102756.
- [8] UNESCO. Global Framework for Value-based Technical and Vocational Education: Case Studies in Sustainable Transportation Education. Paris: UNESCO Publishing.