



Exploration and Practice of Ideological and Political Teaching in the Course of "Fundamentals of Electrical Technology"

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Abstract. This article explores the challenges and teaching strategies of integrating ideological and political education into the course of "Fundamentals of Electrical Technology". The article first emphasizes the importance of ideological and political education in the curriculum, and then analyzes the problems that exist in the implementation process of ideological and political education in the curriculum. Based on these problems, the article proposes specific teaching strategies, including infiltrating ideological and political education requirements into curriculum standards, deeply exploring ideological and political elements in the curriculum, innovating ideological and political education methods in the curriculum, emphasizing teaching evaluation of ideological and political effects, and improving the educational ability of curriculum teachers. Through these strategies, the aim is to build a comprehensive, whole process, and all-round education pattern for all staff, and to enhance the ideological and political education effectiveness of the course "Fundamentals of Electrical Technology".

Keywords: Course Ideology and Politics; Fundamentals of Electrical Technology; Cultivating Virtue and Nurturing People; Teaching Strategies; Ideological and Political Elements; Educational Ability.

1 Introduction

In 2020, the Ministry of Education issued the "Guidelines for the Construction of Ideological and Political Education in Higher Education Curriculum", which emphasized the need to integrate ideological and political education into the talent cultivation system, comprehensively promote the construction of ideological and political education in university courses, give full play to the educational role of each course, and improve the quality of talent cultivation in universities^[1,2]. Curriculum ideological and political education requires teachers to fully explore the ideological and political

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elements contained in various course knowledge, and organically integrate them with teaching content. This integration should be natural and leave no trace, aiming to subtly educate students on ideological and political education, thereby promoting students' improvement in both knowledge learning and moral education. By providing ideological and political education to students during the teaching process, we aim to promote the formation of a comprehensive, all process, and all-round educational pattern. Comprehensively promoting the construction of ideological and political education in the curriculum and teaching reform is not only a key strategic action to achieve the fundamental task of moral education and talent cultivation, but also an important responsibility in higher education and teaching work.

2 The Connotation of Course Ideology and Politics

The focus of ideological and political education in the curriculum is the curriculum, and the starting point and foothold are ideological and political education. Its basic connotation has three key words: educating people, implicit, and collaborative. The so-called "education" means that all types of courses should prioritize value shaping in curriculum construction, integrate ideological and political education into the process of knowledge transmission and ability cultivation, and help students establish correct worldviews, outlooks on life, and values, achieving the organic unity of knowledge transmission, ability cultivation, and value shaping; The so-called "implicit" refers to exploring and utilizing the ideological and political education resources and functions of various courses, carrying out implicit ideological and political education, and subtly integrating ideological and political education into the entire process and every link of education and teaching in a "subtle and silent" way; The so-called "collaboration" refers to the fundamental goal of cultivating socialist builders and successors with comprehensive development of morality, intelligence, physical fitness, aesthetics, and labor skills in the main battlefield of curriculum construction and the main channel of classroom teaching. Through a unified approach of explicit and implicit education, all teachers should effectively guard their own "channel" and cultivate their own "responsibility field", forming a good situation where all professional courses and ideological and political courses go hand in hand, and collaboratively building a comprehensive pattern of educating all staff in the whole process and in all aspects^[3]. Carrying out ideological and political education in courses is a profound practical exploration that focuses on building an education system that comprehensively cultivates morality, intelligence, physical fitness, aesthetics, and labor skills, as well as a high-level talent training system, and improving the "three pronged education" system and mechanism^[4].

3 The Educational Value of Ideological and Political Education in the Course of "Fundamentals of Electrical Technology"

3.1 Internal Requirements for Completing the Task of Cultivating Virtue and Nurturing People

The course of "Fundamentals of Electrical Technology" is a key foundational course for electrical majors in higher vocational education. It is not only an important way for students to master electrical technology knowledge and skills, but also a core link to achieve the goal of moral education^[5,6]. In the current educational context, the design and implementation of this course must be in line with the national educational philosophy, integrating moral education into all aspects of professional teaching. Through the teaching of the course "Fundamentals of Electrical Technology", students are not only required to master the professional knowledge in the field of electrical engineering proficiently, but teachers should also guide students to establish a correct worldview, outlook on life, and values through the careful design of course content. The ideological and political education of the course "Fundamentals of Electrical Technology" is an inherent requirement for completing the task of cultivating morality and talents.

3.2 Important Ways to Improve the Effectiveness of Ideological and Political Education Work

The course of "Fundamentals of Electrical Technology" is aimed at a large number of students and has a large amount of class hours. Therefore, it can serve as an important carrier for conducting ideological and political education courses in electrical majors. At the same time, the course is offered in the first year of college, which happens to be a critical period for cultivating students' ideological qualities and shaping their values. Therefore, it is timely to integrate ideological and political education into the teaching of the course "Fundamentals of Electrical Technology"^[7]. Through ideological and political education, teachers can excavate the patriotism, professional ethics, craftsmanship spirit and other contents contained in the curriculum, and then cleverly integrate the "salt" of ideological and political education into the "soup" of professional courses, so that students can receive subtle value guidance and ideal belief transmission while learning professional knowledge and skills, thereby improving the effectiveness of ideological and political education work^[8].

3.3 Effective Choices to Meet Students' Growth and Development Needs and Expectations

With the continuous changes in society's demand for talent, students' growth and development needs are becoming increasingly diverse and personalized. In this context, integrating ideological and political education into the course of "Fundamentals of Electrical Technology" has become an effective choice to meet students' comprehensive development needs and expectations. Through the teaching of ideological and

political education in courses, we provide richer and more diverse teaching content and activities tailored to the personalized development needs of students. For example, by discussing the country's energy policies, the development trends of the power industry, and the application of electrical technology in social development, students can closely integrate their personal development with the needs of the country and society, thus better planning their career and development direction. This allows students to acquire professional knowledge and skills while expanding their horizons, enriching their knowledge, shaping their character, and strengthening their beliefs, becoming a new generation with comprehensive development in morality, intelligence, physical fitness, aesthetics, and labor.

4 Problems in the Integration of Ideological and Political Education in the Course of "Fundamentals of Electrical Technology"

4.1 Professional Course Teachers have Insufficient Understanding and Lack Ideological and Political Level

Curriculum ideology plays a bridging and linking role through the key subject of "teachers". The professional competence and ideological and political education ability of teachers directly affect the implementation effect of curriculum ideological and political education. This places higher demands on every curriculum teacher. Teachers not only need to master professional course knowledge, but also need to understand the social value behind each knowledge. This requires teachers to have a high level of ideological and political theory. However, in the actual process of carrying out ideological and political practice in the course of "Fundamentals of Electrical Technology", some teachers may lack sufficient experience and ability, which leads to difficulties in effectively integrating ideological and political elements into professional course teaching. Often, they only focus on transmitting professional knowledge and rarely mention ideological and political theory, or they do not combine with professional knowledge in the teaching process, mechanically applying some ideological and political content and methods, which not only fails to explain the key points of ideological and political education, but also wastes time. In the process of knowledge dissemination, there is a phenomenon of "two skins" between ideological and political education and professional teaching^[8,9]. The professional competence and ideological and political education ability of teachers directly affect the implementation effect of curriculum ideological and political education. Some teachers may lack sufficient experience and ability in ideological and political education, making it difficult to effectively integrate ideological and political elements into professional curriculum teaching.

4.2 Unequal Acceptance Among Students

The inconsistency in student acceptance is a major challenge in promoting the integration of ideological and political elements into the course of "Fundamentals of Electrical Technology". The acceptance of students is constrained by individual differences, which stem from various factors such as individual students' values, interests, and disciplinary tendencies. Some students may focus more on the cultivation of practical skills and have relatively lower attention to ideological and political elements, which makes it difficult for the integration of ideological and political elements to meet the needs of all students. On the other hand, some students believe that the learning of professional skills is already heavy enough, and adding ideological and political elements may make the academic burden even heavier, which may trigger students' resistance.

4.3 Challenges in Matching Professional Course Knowledge Points with Ideological and Political Elements

In integrating ideological and political elements into the basic courses of electrical technology, there is a daunting task of element matching challenge^[10]. This challenge mainly comes from multiple aspects, including differences in course content, diversity of ideological and political elements, and how to organically integrate the two. The knowledge points of electrical technology courses are highly specialized and technical, while ideological and political elements focus on values, ethics, and social responsibility. There are significant differences between the two in terms of content and form, and finding their commonalities and effectively matching them is the primary challenge. At the same time, their emphasis is different. The teaching goal of professional courses is to impart professional knowledge and skills, while ideological and political education focuses more on cultivating students' ideological qualities, moral sentiments, and social responsibility. This difference in emphasis requires careful consideration and balance between the two in the process of integration. In addition, ideological and political elements have diversity and universality. How to select elements that match the knowledge points of professional courses among the numerous ideological and political elements is a question that requires careful consideration. With the continuous development and progress of society, ideological and political elements are also constantly updated and changed. How to maintain the timeliness and pertinence of ideological and political elements, and make them consistent with professional course knowledge points, is also an important challenge.

5 Ideological and Political Teaching Strategies for the Course "Fundamentals of Electrical Technology"

5.1 Clarify Course Objectives and Incorporate Ideological and Political Education Requirements into Curriculum Standards

In the process of formulating curriculum standards, organically integrating the requirements of ideological and political education into every aspect of the curriculum system is an important strategy to achieve the ideological and political goals of the curriculum. It is necessary to establish curriculum knowledge, quality, and ideological and political education goals, and organically integrate the requirements of ideological and political education into every aspect of the curriculum system. Teaching design should not only consider the transmission path of professional knowledge, but also integrate ideological and political education content into the teaching process. Based on the characteristics of the discipline and the professional needs of students, and by grasping the teaching outline, we will excavate the ideological and political elements such as traditional culture and ideological guidance contained in the curriculum, closely link students' success with the development of the country, and make the course of "Fundamentals of Electrical Technology" an effective carrier of ideological and political education. The teaching objectives of the course "fundamentals of electrical technology" is shown in Figure 1.

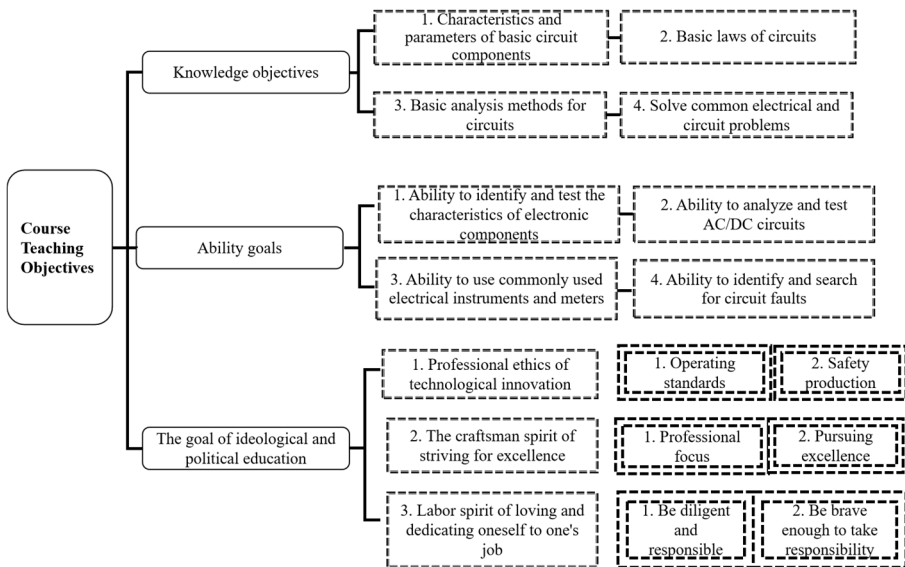


Fig. 1. Teaching objectives of the course "fundamentals of electrical technology"

5.2 In Depth Exploration of Ideological and Political Elements in Courses, Construction of a Case Library of Ideological and Political Courses

The ideological and political elements in the course of "Fundamentals of Electrical Technology" are mostly implicit. Teachers need to raise their awareness, combine the main teaching content and knowledge points of the chapters of this course, and explore the ideological and political elements on the basis of in-depth learning of the course's ideological and political concepts. Through continuous summarization of experience in teaching practice, we will build a resource library containing diverse teaching methods and specific cases^[11]. The selection of ideological and political cases should be representative and inspiring. The selected cases should be able to represent an important aspect or development trend in the field of electrical technology, such as smart grids, new energy generation, motor control, etc. The cases should contain ideological and political elements, such as craftsmanship spirit, patriotism, scientific and technological innovation spirit, professional ethics, etc., which can guide students to establish correct values and professional ethics. Simultaneously inspiring, it can stimulate students' thinking, cultivate their innovative thinking and problem-solving abilities.

(1) We can talk about the historical background, stimulate students' patriotism and learning enthusiasm. Telling about the rapid development and brilliant achievements of China's power industry can not only enhance the fun of classroom teaching, but also deepen students' understanding of the struggle of the motherland and the nation, thereby inspiring their patriotism.

(2) Teachers come to share stories of scientists and engineers. The stories of scientists and engineers not only enrich the content of professional courses, but also serve as hidden resources for ideological and political education. When telling these stories, teachers can emphasize the exploratory spirit and engineering literacy of scientists, which can not only stimulate students' interest in learning, but also improve their learning motivation and encourage them to bravely challenge the forefront of the subject.

(3) Teachers and students actively explore industry trends, enhance students' competitiveness and innovation spirit. In the teaching process, teachers can introduce the current situation and trends of industry development related to the curriculum, which can help students deeply understand that industry development is not always smooth sailing, thereby stimulating students' competitiveness and innovation spirit.

The ideological and political resources for the course of "Fundamentals of Electrical Technology" (Part) is shown in Table 1.

Table 1. Ideological and political resources for the course of "Fundamentals of Electrical Technology" (Part)

| Serial number | Learning asks | Learning content | Exploration of ideological and political elements | Integration method |
|---------------|---------------|------------------|---|----------------------------------|
| 1 | Understand | Introduce the | 1. Main and sec- | 1. By introducing the concept of |

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|---|----------------------------------|---|---|---|
| | circuits and physical quantities | concept of circuit models and lead students to understand basic circuit physics quantities | secondary contradictions, adept at focusing on key points | circuit models and combining the dialectical relationship between the primary and secondary contradictions of Marxist methodology with the course content, students are guided to be good at grasping key points and concentrating their efforts to solve the primary contradictions in practice. |
| 2 | Understanding Kirchhoff's Law | Study the Content and Application of Kirchhoff's Law | <ol style="list-style-type: none"> 1. Cherish time and study hard 2. Diligent research spirit and scientific attitude | <ol style="list-style-type: none"> 1. By introducing Kirchhoff's life and major achievements, understand the background of Kirchhoff's law discovery and the main achievements of the great scientist Kirchhoff, and inspire students to cherish their youth, study diligently, and strive for success. 2. Through the stories of scientists, students can understand that the derivation of scientific theorems requires persistent effort, and encourage them to develop a spirit of inquiry and a scientific attitude in their studies. |
| 3 | Circuit equation method | Introduce the content and applications of branch current method, mesh current method, and node potential method | <ol style="list-style-type: none"> 1. Scientific thinking; 2. The awareness of analyzing specific problems on a case by case basis. | <ol style="list-style-type: none"> 1. From branch current method to mesh current method and node potential method, it reflects the idea of progressive dimensionality reduction. Through the introduction of different analysis methods, it cultivates students' scientific thinking ability; 2. Guide students to learn how to summarize the characteristics of different analysis methods, distinguish different circuits, choose different analysis methods based on different circuits, and cultivate students' awareness and ability to analyze specific problems. |
| 4 | Analysis of Sine AC Circuit | Introduce the representation method of alternating current and the concept of power | <ol style="list-style-type: none"> 1. Scientific and systematic thinking; 2. Awareness of green energy conservation and environmental protection. | <ol style="list-style-type: none"> 1. By introducing the process of proposing the phasor method, students can recognize its cleverness and cultivate their scientific and systematic thinking. 2. By introducing the concept of power factor and methods to improve load power factor, we advocate for students to use electricity |

| | | | | |
|---|------------------------|---|---|--|
| | | | | scientifically and save electricity, and cultivate their awareness of green energy conservation and environmental protection |
| 5 | Three-phase AC circuit | Introduce the composition of the power system, China's achievements in ultra-high voltage transmission, understand the current status of global energy development, and learn about three-phase alternating current knowledge | 11. Patriotic spirit and national pride; 2. Sustainable development concept and engineering ethics awareness | 1. By playing the video "Great Achievements of China's Power Engineering", students can learn about China's great achievements in ultra-high voltage transmission, thereby inspiring national pride and patriotic enthusiasm; 2. Through online learning of the current status of global energy development, students can establish sustainable development thinking and engineering ethics awareness |
| 6 | Electric safety | Common knowledge of daily electricity safety | 1. Safe use of electricity; 2. Integrating theory with practice | 1. Through students' learning of safety accident cases, teachers warn students to follow scientific laws and pay attention to electrical safety. 2. Teachers guide students to be good at integrating theory with practice in theoretical learning, and cultivate their own engineering concepts and application abilities. |

5.3 Innovative Ways of Ideological and Political Education in Curriculum

Innovating the way of ideological and political education in curriculum is a continuous and important process. In the teaching process, we adhere to the student-centered teaching philosophy and combine value guidance with knowledge transmission. Based on the needs of professional talent cultivation, course nature, and student characteristics, flexible methods such as project-based teaching, case-based teaching, interactive teaching, and heuristic teaching are adopted to cleverly integrate ideological and political content into teaching, in order to achieve implicit education for students. At the same time, teachers should give full play to the advantages of the Internet, collect online teaching resources and curriculum related ideological and political materials, integrate online and offline teaching resources, create a new model that integrates online and offline teaching, in and out of class teaching, and theoretical and practical operations, make full use of the main position of curriculum teaching, so as

to integrate ideological and political education into classroom knowledge teaching, focus on professional ethics, professional quality, craftsmanship, and labor spirit education in the practical teaching link, and ensure that skill training and ideological education are parallel. By continuously exploring and practicing new educational models and methods, we aim to improve the pertinence and effectiveness of ideological and political education.

5.4 Pay Attention to the Effectiveness of Ideological and Political Education in Teaching Evaluation, and Stimulate the Internal Drive of Ideological and Political Education

Teaching evaluation should comprehensively consider three aspects: knowledge mastery, ability development, and quality improvement. It should combine the evaluation of professional teaching with ideological and political education, and establish a multidimensional evaluation mechanism from classroom, extracurricular, online, and offline perspectives[12]. The evaluation methods should include: (1) classroom participation: process evaluation by observing students' learning activities in the classroom; (2) Homework completion: Conduct accompanying evaluation through homework after class; (3) Course project: Display and evaluate through specialized tasks related to the course; (4) Final assessment: Conduct a final evaluation through the final exam. In addition, value-added evaluation of ideological and political education courses should be included, with students' performance in competitions, social practices, volunteer activities, and other activities as evaluation indicators, and ultimately included in the total score. The ideological and political evaluation is embedded in the entire learning process in both implicit and explicit ways. (1) Implicit evaluation: Performance evaluation is conducted by observing changes in students' learning attitudes, improvements in scientific literacy, and participation in social services. (2) Explicit evaluation: Quantitative evaluation is conducted through classroom interaction, group discussions, team collaboration, presentations, and other activities to assess the degree of achievement of students' learning goals.

5.5 Improving the Education Ability of Curriculum Teachers

Professional course teachers are the main force in carrying out ideological and political education in courses, and it is necessary to strengthen their ideological and political abilities. Firstly, it is necessary to strengthen the subject consciousness of curriculum ideological and political education among curriculum teachers, so that they understand the connotation and contemporary value of curriculum ideological and political education. At the same time, it is necessary to strengthen the unified consciousness of teachers in teaching and educating, so that teachers can integrate knowledge imparting and educating, and consciously practice the important task of teaching and educating. Secondly, it is necessary to enhance the ideological and political literacy of teachers. Schools should strengthen the ideological and political education and training of professional course teachers, and use activities such as theoretical lectures, expert lectures, and current affairs exploration to improve the ideological and political

literacy of teachers in the course of "Fundamentals of Electrical Technology". At the same time, teachers should also enhance their ability to effectively integrate and apply professional knowledge with ideological and political education. The school invites experienced experts to provide guidance to teachers, share their experiences and insights in curriculum ideological and political construction, and help professional course teachers enhance their ability to integrate ideological and political resources.

6 Conclusion

The course of "Fundamentals of Electrical Technology" plays a crucial role in talent cultivation as a core course for higher vocational electrical majors. By combining ideological and political education with professional teaching, we can not only enhance students' professional skills, but also cultivate their sense of social responsibility and professional ethics. The teaching strategy proposed in this article aims to solve the problems in the implementation of ideological and political education in the curriculum, and provide reference for other professional courses. In the future, we will continue to explore and optimize the teaching methods of ideological and political education in the curriculum, in order to achieve better educational effects and cultivate more high-quality technical and skilled talents with both morality and ability for the country.

References

1. Notice of the Ministry of Education on Issuing the Guiding Outline for Ideological and Political Construction of Higher Education Curriculum. [A/OL].(2020-05-28) https://www.gov.cn/zhengce/zhengceku/2020-06/06/content_5517606.htm.
2. Xu YX, Xu JC, Song SJ. (2024). Ideological and Political Construction and Teaching Practice of Basic Electrical Technology Course [J] China Education Technology Equipment, 06: 71-73+76. https://kns.cnki.net/kcms2/article/abstract?v=2arE9-pF_S3Stx97R2D1RUF4H1Cioi3IUUwOKo5N0wXRvBTM29ZDoNkRJCKXoZII7EL1ImmGn6Glt8R03GUZ8IN11_8YbaKz-trEqfF_8aqC-CVhxA68Tvpbef_uPTygb17ucxjgBegXluqq0z2VAhGmftUkdt2B8CJ1-SonOZVtUwpjxgFBtg9jsVQLRxn&uniplatform=NZKPT&language=CHS.
3. Liu WK. (2024). The basic connotation, value implication, and focus of ideological and political education in university courses [J] Journal of North China University of Water Resources and Electric Power (Social Sciences Edition), 40 (01): 41-45 DOI:10.13790/j.ncwu.s.k.2024.005.
4. Han XZ. (2020). On Several Basic Issues in the Construction of Course Ideology and Politics: What is Course Ideology and Politics, Why, How to Do It, and How to Look at It [J] Beijing Education (Higher Education), 05: 48-50. https://kns.cnki.net/kcms2/article/abstract?v=2arE9-pF_S2ngJMSdpWk3SezKH9hE83RCT7YWBzbouq87sZKf8gX7ypWa2roNwM8goR4NpTHklCbQKxnAH4448nAdJh4gxDwLzkqH_YFQTPhqcnS8T19bp9ZRfiVkfD H4Wo94_8kc5QWGF3y9-NWzt_Z0Fld1Y25Gun_byESTyCXGR07yDTHl-sxK1Vxif4&uniplatform=NZKPT&language=CHS.
5. Yu HY, Dai Y.(2022). Teaching Analysis of the Course "Electrical and Electronic Engineering" in the Mechanical and Electrical Major of Vocational Colleges [J] Shanxi Youth, 11: 62-64. <https://kns.cnki.net/kcms2/article/abstract?v=ZOnxTxd1G4KcibtBpuO5v8-CVa4A>

- NKUaBn8rSVC1VYg5doqRUSPiBkxxCdvdE0PZrx8hyjseQRNP0aCT2IdBna9ncsrEF2A
Tq7g6o8DvCUJe5Y5JcTGVVQCeLcUcy9b-ql1sQsvrm1qhqt1KCgf3sGht1yfnBNfkBV
QTRqByPbRytw2EzCq3LwyWsGW_ZdmE&uniplatform=NZKPT&language=CHS.
6. Lv M. (2023). Research on the Teaching Mode of Ideological and Political Education in the Course of "Fundamentals of Electrical Technology" [J] Chengcai, 18: 50-52. https://kns.cnki.net/kcms2/article/abstract?v=ZOnxTxdlG4Lq0PBUCwSIXkpQ9cMPpaYRYQMghZAzO_vtTfCKzxpzGZpWkr4hRaKlsqMiBApms4TUXvRQSW5by2RcTzrs3lb3RXsSa1XL aEs5qWyCXQJtutDBA04ZW3mnwpyXg_X0QMJSrx4WWmeiLmALuOjuQj6c213nDiRYGyflbJ1flTlwLzPkx0VytSE6l&uniplatform=NZKPT&language=CHS.
 7. He YY. (2021). Teaching Reform and Practice of "Electrical and Electronic Technology" Course under the Concept of Course Ideology and Politics [J] Journal of Guangdong Vocational and Technical College of Transportation, 20 (04): 36-40. https://kns.cnki.net/kcms2/article/abstract?v=2arE9-pF_S3bvvyFy-Z_yR-xxWWS7CJVg1062CmbfpXJSeTG-4pK0XpFE9NMMK0a-I4rYaHILAz7G3gal1dthPvFwxIBFb4zB0q27FTKKAfZi6JzthjaNzHLH6aVtXTUP5IWk4OZnAGen9uUelqYLe_TY1QgVFJtGOy5TdWUWUud4ELIMxVv9qZbtuz7TF-v&uniplatform=NZKPT&language=CHS.
 8. Zhou Z. (2024). Exploration of Ideological and Political Teaching Practice in the Course of Electrical Engineering and Electronics [J] Era Automotive, 13: 43-45. https://kns.cnki.net/kcms2/article/abstract?v=2arE9-pF_S33PsXszozMRIo18BLNczFr0tDVCxLzRyPxNxSh1a-ZMswa5sK-4UIIa1EbAnCSaarZVdM-Z5OTUe7TuaCWKjy5dnkxg48ReVtglzCQB1Vfry5deTHsC7FsjsweochVWe9bPuwLpzkcj7-lidnDadoGhrfWgOImJ53rQ4Ey8m210viJNK3WrsIXd&uniplatform=NZKPT&language=CHS.
 9. Chen H. (2019). Exploration of the Practice of "Course Ideology and Politics" in Professional Courses of Vocational Colleges [J] Maritime Education Research, 36 (04): 85-87. http://kns.cnki.net/kcms2/article/abstract?v=2arE9-pF_S3TqNSWz9cP210r1AI4FViRa-xt4Hiy8b18tUkS08UxnWLDvzlnmzAZ6L1VII9bmVyroG_oHa345_r1hHNttKIDkkeZQjiDv1XuBhS5EWgZZgaV6Eg5UUAfPpA5_smy_JuqryKSomWHzDNMcy48Y0oJUG0GozaDFCv1d1RBQ0fabxtRf7RuB22&uniplatform=NZKPT&language=CHS.
 10. Liu XM. (2024). Exploration of integrating ideological and political education into the teaching of vocational electrical and electronic technology courses [J] Scientific Consultation (Education and Research), 08: 161-164. https://kns.cnki.net/kcms2/article/abstract?v=ZOnxTxdlG4IRyTdtfyfpgc4u5FL5r9xpzXc3yzwlRMZMpz4UYKaqyDeFO9Da_jZg4vfOvPHyamvT4Zjkz8XJZzhZizo1-392qa3gqFeRhvVIIvT6OEjch_UsedE6-q02-f1E9eqNLLvws7LT3dZ44XR1Ebksaxl8sw0nbF71j7u-ems6TVONbcFxlbmGXPk_&uniplatform=NZKPT&language=CHS.
 11. Wang LP, Jia XY, Pei YF. (2023). Research on the Practice of Ideological and Political Education in Finance Courses and the Cultivation of Moral and Professional Qualities of College Students [J] Economic Research Guide, 02: 119-121. https://kns.cnki.net/kcms2/article/abstract?v=2arE9-pF_S0f_-1rIECEi9YI9BIjGYB74XkIE2L_I8GHJZILRxiZXNZ9w1Mg0tZD114RwBOhh-pKXOPYDRckhmLRzguoBshL73hABfkBYP2iR4t40hz_9Ly10WT9p qk7GAMB6nNVPsIuRkQqTMVYw9aFThO6nMt_csmhuVoRn6oOtiJRcH3GTyqrEWSofD4&uniplatform=NZKPT&language=CHS.
 12. Tang Y, Liu ZY, Wang W, etc. (2024) Preliminary Exploration on the Construction of Ideological and Political Resource Library for the Course of "Fundamentals of Electricians and Circuits" [J] Education and Teaching Forum, 14: 85-88. https://kns.cnki.net/kcms2/article/abstract?v=2arE9-pF_S3CKweI4zbCHF2hc8KCDNHJNbpzxb16F_xd5hof0_uD79GJ7wtf0cc2Y4daJc6dbIUbgRQ2Fqj_c2CE3QA9Cs0QLrsbWqyt9Klq1zmKVju00IhEUY8DI_D5Of0dc3raaxF2mfl903QIaOkE0o-QjMfQz00lfp5w-BGcUsHBAZ9Mcn73r9D8Ld&uniplatform=NZKPT&language=CHS.

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