

# Exploration and Practice of Integrating Ideological and Political Education into the “Comprehensive Practical Training in Prefabricated Building Construction” Course

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**Abstract:** This paper focuses on the ideological and political construction of the course “Comprehensive Practical Training of Prefabricated Building Construction” and deeply discusses its exploration and practice process. By building an ideological and political teaching system in line with the characteristics of “Comprehensive Training of Prefabricated Building Construction,” ideological and political elements such as industry spirit, professional ethics, and social responsibility are organically integrated into all links of practical training and teaching. In terms of teaching methods, various innovative means such as case analysis, role-playing, and group discussion are adopted, and modern information technologies such as virtual reality and augmented reality are used to improve the teaching effect. At the same time, a diversified teaching evaluation system is formulated to ensure the sustainability and effectiveness of ideological and political education. This study not only enriches the theoretical research of ideological and political courses but also provides a practical reference for the ideological and political construction of similar courses, which is of great significance for promoting the overall improvement of the quality of talent training in higher education.

**Keywords:** Prefabricated building; Comprehensive practical training; Ideological and political courses; Practice

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## 1. Introduction

With the rapid development of the global economy and the acceleration of the urbanization process, the construction industry faces unprecedented changes and challenges. Prefabricated building, as a green, efficient, and sustainable building method, has attracted wide attention and developed rapidly around the world with its advantages of prefabrication, standardization, and modularization. In recent years, driven by dual policy guidance and market demand, China’s prefabricated construction industry has achieved a leap from quantity to quality. The new area has continued to grow, the industrial chain has been continuously improved, and the

technology has been significantly improved. The rapid development of this industry has not only promoted the transformation and upgrading of the construction industry but also put forward new and higher requirements for talent training <sup>[1]</sup>.

In the field of higher education, curriculum thinking and politics, important for cultivating people by virtue, are increasingly valued. The Ministry of Education clearly put forward that ideological and political education should run through the entire process of talent training, so as to realize full staff, whole process, and all-round education <sup>[2]</sup>. For engineering professional courses, the implementation of ideological and political courses is particularly necessary. It can not only help students to establish the correct world outlook, outlook on life, and values, but also cultivate students' sense of social responsibility, professional ethics, and innovative spirit, laying a solid foundation for their future career development <sup>[3,4]</sup>.

This study aims to explore the effective ways and methods of ideological and political construction through a thorough analysis of the rapid development background of the prefabricated construction industry and its new requirements for talent training, combining the importance of ideological and political courses in higher education and the necessity of its implementation in engineering courses <sup>[5]</sup>. By constructing the ideological and political teaching system in line with the characteristics of the course, ideological and political education is organically integrated into every link of practical training and teaching, and the organic unity of knowledge transmission and value guidance is realized. This study is not only helpful to enrich the theoretical research on the ideological and political development of courses, but also to provide practical reference for the ideological and political construction of similar courses, and to promote the overall improvement of the quality of higher education talent training.

## **2. Theoretical basis of ideological and political courses**

In professional courses, ideological and political orientation is an indispensable part, which is not only a supplement and extension of professional knowledge but also an important way to cultivate students' comprehensive quality and sound personality. The comprehensive training in prefabricated construction for this course aims to deepen students' understanding of prefabricated construction technology and enhance their practical application skills through hands-on teaching. At the same time, it guides students in developing the right professional concepts, ethics, and social responsibility, laying a solid foundation for their future careers.

Based on the above analysis, the theoretical framework combining ideological and political courses with the course of prefabricated building construction is constructed. The framework takes ideological and political courses as the core, takes prefabricated building construction technology as the carrier, and through the practical teaching link, integrates ideological and political elements such as industry spirit, professional ethics, and social responsibility into the entire process of course teaching. Specifically, through various teaching methods, such as case analysis, role-playing, and group discussion, students can deeply understand and practice the industry spirit, professional ethics, and social responsibility while mastering professional skills. At the same time, through school-enterprise cooperation, project-driven, and other teaching modes, students can experience the corporate culture in practice, enhance their sense of social responsibility, and realize the organic combination of theoretical knowledge and practical experience. The prefabricated construction comprehensive training course's theoretical basis of ideological construction is to deeply grasp the core principles of course education, clarify its orientation and function in the professional course, fully excavate and use the prefabricated construction industry ideological elements, build a scientific and reasonable theoretical framework, and provide strong support for the effective implementation of course education.

### **3. Principles of ideological and political education**

#### **3.1. Integrity of the professional course construction content**

In the prefabricated construction comprehensive training course construction, the teaching content should be comprehensive and systematic, covering the design principle of prefabricated buildings, components, assembly construction, quality control, safety management, and other core skills knowledge, and is integrated into industry norms, laws and regulations, and the concept of sustainable development of comprehensive literacy content. Through the construction of a complete knowledge system, students can not only master advanced prefabricated construction technology but also deeply understand the social responsibility and mission of the construction industry, laying a foundation for becoming construction engineers with a high sense of responsibility and mission.

#### **3.2. Rationality of the ideological and political elements of the professional courses**

In the integration of ideological and political elements in the course, it is necessary to adhere to the principle of “moistening things silently” to ensure that the ideological and political content is closely related to the knowledge of professional courses, reasonable and natural. For example, when explaining the environmental advantages of prefabricated buildings, the concept of ecological civilization construction can be introduced to guide students to think about how to reduce resource consumption and protect the ecological environment during the construction process; when discussing construction safety and quality control, the combination of professional ethics and craftsman spirit should emphasize the importance of responsibility, refinement, and continuous improvement. Through specific cases, group discussion, role-playing, and other forms, students can feel the connotation of ideological and political affairs in practice, and realize the organic combination of knowledge transmission and value guidance.

#### **3.3. Variety of ideological and political teaching forms in professional courses**

In order to enhance the attractiveness and effectiveness of ideological and political teaching, diversified teaching forms should be adopted. First of all, modern information technology, such as virtual reality (VR) and augmented reality (AR), is used to simulate the construction scene of prefabricated buildings, so that students can learn professional knowledge in an immersive experience, and feel the importance of professional ethics and safety awareness. Secondly, field visits are organized to visit the prefabricated construction project site, and industry experts are invited to conduct on-site teaching, so that students can intuitively understand the cutting-edge trends of the industry and enhance the sense of reality and urgency in learning. In addition, activities such as keynote speeches, debate competitions, and project reports will be carried out to encourage students to think and express around the ideological and political themes of prefabricated buildings, so as to cultivate their innovative thinking, teamwork, and sense of social responsibility. Through these diversified teaching forms, we not only enrich the course content but also improve students' participation and learning effect.

### **4. Curriculum ideological and political teaching integration methods and strategies**

#### **4.1. Adopting innovative teaching methods**

In order to effectively integrate ideological and political elements, a series of innovative teaching methods need to be adopted in the course of “Comprehensive Practical Training of Prefabricated Building Construction.” First of all, the implementation of the project-oriented and task-driven teaching mode is implemented, taking the practical problems in the construction process of prefabricated buildings as the learning task, and students are guided to learn professional knowledge in the process of solving specific problems and to think and practice

the ideological and political contents such as professional ethics and social responsibility. Secondly, the flipped classroom mode is adopted, in which students can learn basic knowledge independently through videos and reading materials before class. In class, interactive activities such as case analysis, group discussion, and role-playing are emphasized to deepen the understanding of ideological and political themes. In addition, the workshop teaching method can be introduced to simulate real work scenarios, so that students can complete the design, construction simulation, and other tasks of prefabricated buildings in groups, cultivating their teamwork and innovative spirit and integrating the education of professional ethics and social responsibility.

#### **4.2. Utilizing modern information technology means**

Modern information technology provides strong support for the ideological and political teaching of the course of prefabricated building construction. First of all, the use of VR and AR technology creates a simulation of a prefabricated building construction environment, allowing students to experience the construction process in the virtual space and feel the importance of construction safety and quality control. At the same time, integration of environmental protection, energy conservation, and other ideological elements can enhance students' environmental awareness and social responsibility. Secondly, an online learning platform should be developed to integrate course resources, teaching videos, case analysis, and other content to realize mixed online and offline teaching, facilitating students to learn anytime and anywhere. Ideological and political discussion areas should be set up to encourage students to express their opinions and promote the exchange of ideas. In addition, big data analysis technology can be used to track and analyze students' learning behavior and performance changes, so as to provide data support for personalized teaching and ensure the pertinacity and effectiveness of ideological and political education.

#### **4.3. Formulating a diversified teaching evaluation system**

In order to ensure the effect of ideological and political teaching of "Comprehensive Practical Training of Prefabricated Building Construction," a diversified teaching evaluation system needs to be formulated. First of all, the combination of process evaluation and final evaluation is adopted to not only focus on students' final learning results but also emphasize students' performance, attitude, and participation in the learning process, so as to comprehensively evaluate their comprehensive quality. Secondly, various evaluation methods such as peer evaluation, self-evaluation, and student mutual evaluation are introduced to reflect students' learning situation from different angles and enhance the objectivity and impartiality of evaluation. In terms of evaluation content, in addition to the mastery of professional skills, attention should be paid to the investigation of students' ideological and political literacy, such as professional ethics, social responsibility, environmental awareness, and other aspects. Finally, a feedback mechanism needs to be established to provide timely feedback on the evaluation results to help students clarify their shortcomings and encourage them to make progress. At the same time, teachers adjust teaching strategies and methods according to the feedback to ensure the sustainability and effectiveness of ideological and political education.

### **5. Conclusion**

Aiming at the course "Comprehensive Practical Training of Prefabricated Building Construction," this paper explored the ideological and political construction of the course and effectively addressed the new requirements of the rapid development of the prefabricated construction industry for talent training. By integrating ideological and political education into each link of practical training and teaching, not only the students' understanding and application ability of prefabricated building technology are enhanced, but students are



also guided to establish correct professional concepts, professional ethics, and social responsibility. Through case analysis, role-playing, group discussion, and other diversified teaching methods, combined with modern information technology means, such as VR, AR, etc., the organic combination of knowledge transmission and value guidance has been realized. At the same time, a diversified teaching evaluation system is formulated to ensure the comprehensiveness and effectiveness of ideological and political education. This study not only enriches the theoretical research of ideological and political courses but also provides a practical reference for the ideological and political construction of similar courses, which is of great significance for promoting the overall improvement of the quality of talent training in higher education.

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## Disclosure statement

The author declares no conflict of interest.

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