

Reform and Exploration of Ideological and Political Teaching of Civil Engineering Survey under the Background of the New Era

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Abstract : In recent years, the rapid development of China's construction field has gradually widened the scale of civil engineering, and the demand for excellent talents is more urgent through the application of new technology. In the new era, in order to better cultivate excellent talents in the field of civil engineering, most colleges and universities have set up special civil engineering measurement courses. In such course activities, the role of curriculum ideology and politics cannot be ignored, which is very key to cultivating college students' professional quality and comprehensive ability. Based on this, this paper studies and analyzes the ideological and political teaching reform of civil engineering survey course under the background of the new era, so as to provide theoretical reference for the development of relevant research.

Keywords : New Era; Civil Engineering Survey Course; Ideological and Political Teaching; Reform

1. Introduction

Contemporary college students are the builders and successors of China's socialism and exquisite craftsmen in various industries. In the process of curriculum construction, surveying will deeply explore the ideological and political elements of socialist core values and the ideological and political connotation of "craftsman spirit", penetrate into all teaching links with various teaching forms and expression methods, and inherit the spirit of craftsmen in large countries. We should make full use of the ideological and political curriculum, determine the actual objectives of ideological and political curriculum, and adopt scientific and reasonable methods to ensure the efficient implementation and development of civil engineering survey curriculum activities, so as to cultivate high-quality talents for the field of civil engineering.

2. Ideological and political connotation of civil engineering survey course

Civil engineering survey course is a compulsory course for professional knowledge platform. It is an important professional basic course for civil engineering specialty. The course is usually set up in sophomore year. It is a compulsory course for civil engineering specialty. The course has a wide audience, so the survey course occupies an important position. According to the school orientation and the talent training program of civil engineering specialty of the university, it aims to train highly responsible engineers with innovative spirit in the new era. While emphasizing the cultivation of skilled talents, teachers should infiltrate the ideological and political elements of the course, fully excavate the ideological and political elements contained therein, and design specific teaching contents, in order to ensure the realization of the goal of building morality and cultivating people, and pay attention to the cultivation of college students' post responsibilities and professional quality, so as to improve college students' love and professionalism, and implement the goal of integrity-based, unity and cooperation.

Sophomores have not yet fully understood the civil engineering major, and the development direction is not clear. If there are reasonable teaching methods to guide, students will quickly clarify the direction of learning the major. Therefore, the civil engineering survey course has laid a good foundation for college students' professional course learning, and teachers should apply

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more ideological and political elements of the course, in order to guide college students to establish correct three views, lay a good foundation for college students to learn and master more curriculum knowledge, to cultivate excellent talents for our society.

3. Reforming measures of ideological and political teaching of civil engineering survey course under the background of new era

3.1 Practice the ideological and political construction of surveying course with the concept of engineering education certification and the core of “Building Morality and cultivating people”

In the actual teaching of civil engineering survey course, we pay attention to the good combination of curriculum objectives and curriculum ideological and political objectives, focus on the cultivation of college students' cognition and consciousness of ownership, and improve their sense of mission and national pride, so as to realize the good combination of skill type, knowledge type and quality type. It emphasizes that in the process of acquiring college students' professional knowledge and skills, we should realize the good combination between college students' sense of responsibility and individual ideal, emphasize the cultivation of college students' humanistic and scientific literacy, to ensure the efficient implementation of practical activities, and clarify the education of their professional outlook. In the course of ideological and political activities, teachers should achieve a breakthrough in ideas, improve the civil engineering survey course to the height of curriculum ideological and political education, clarify the specific educational objectives, and let college students establish a correct three outlooks.

3.2 Innovating the educational content and forming a new pattern of curriculum ideological and political education

According to the multi specialty, multi form and multi-level characteristics of civil engineering, the course of civil engineering survey should reasonably allocate class hours, scientifically design the teaching content of the course, and build an appropriate and reasonable teaching system, so as to realize the good combination of the survey course with the national will and political literacy, and take the measurement course of our university as an example:

The content of the theory course is based on the basic measurement skills as the core, supplemented by construction measurement, and three teaching modules are established:

The first teaching module includes the basic work of measurement, namely leveling, angle measurement, distance measurement, error theory, small area control measurement, etc. In this module, the ideological and political integration points are as follows:

(1) For students who come into contact with professional courses for the first time, cultivate students' professional ideal, career awareness and professional attitude, take the measurement of professional ethics as the criterion, and reflect the socialist core values;

(2) Theory guides practice and master correct theoretical methods to guide field practice;

(3) The measurement results meet the accuracy and Requirements of the Technical Specification for Measurement. Understand the importance of working standards;

(4) Each link of the measurement work requires the attachment of the measurement technical specifications, the data is true and reliable, and has the “craftsman spirit”;

(5) The experimental course needs to be carried out in groups to make students realize the importance of “unity and cooperation” and collective sense of honor;

(6) Through the control concept of control measurement and the spread of error, experience the establishment of national control network and cultivate a rigorous and realistic working attitude.

The second teaching module includes the mapping and application of large-scale topographic map; In this module, the ideological and political integration points are as follows:

(1) Master the current measurement technology and realize the limitations of different measurement methods.

(2) Enhance national pride by learning the theoretical knowledge of topographic map.

The third teaching module: professional construction survey, including building construction survey and road construction survey; In this module, the ideological and political integration points are as follows: Apply advanced measurement methods to construction measurement, serve the society, serve the people and reflect the value of life.

After the theoretical course, the practical teaching content focuses on completing the measurement task in 2 weeks, and the ideological and political elements are integrated in the process:

(1) Establish team consciousness: correctly treat the assigned tasks and cooperation among team members, carry forward team consciousness and enhance the sense of collective honor, which is not only the ideological and moral character of college students, but also the embodiment of socialist core values;

(2) Enhance the sense of responsibility: A correct and complete measurement result requires everyone's careful work attitude and serious and realistic work style;

(3) Taking good care of instruments and equipment is also a responsibility entrusted to everyone by laws and regulations;

(4) The standardization of data and the confidentiality of design measurement results are the professional ethics that surveyors should have.

In this case, we should constantly guide college students to solve engineering problems, and implant ideological and political elements in the process of college students' learning knowledge.

3.3 Innovating teaching methods and using a variety of teaching methods

The civil engineering survey course is very practical and theoretical. Teachers should take the ideological and political content of the course as the key, organize a variety of teaching contents, and deeply excavate the educational factors in the ideological and political course in combination with the specific syllabus, so as to promote the healthy growth and development of college students. For example:

3.3.1 Online and offline combination mode

The combination of online and offline and the "flipped classroom" not only break the limitations of traditional teaching in time and space, but also enable students to study independently through the network at anytime and anywhere. In flipped classroom teaching, we should take students as the main body and focus on the integration of inspiration, answering question and discussion to promote classroom teaching, in order to cultivate students' professional ideal, career awareness and professional attitude, take the measurement of professional ethics as the criterion, and reflect the socialist core values.

3.3.2 Introducing case teaching method

Focusing on the development trend of the civil engineering industry, it has efficiently integrated engineering cases, combined with the engineering practice, deeply integrated with the professional curriculum group, met the graduation requirements of professional certification for students, and quickly and effectively trained engineering and technical personnel. By reproducing the practical problems of case engineering projects, we can cultivate students' ability of autonomous learning and problem analysis, and stimulate students to put forward solutions. By comparing with the actual engineering scheme, deepen the impression of curriculum knowledge, we can improve the ability of knowledge application, cultivate students' innovative thinking, and facilitate the development of integrated teaching activities.

3.3.3 Actively participating in engineering practice

Teachers guide college students to participate in the construction site practice, improve their subjective cognition, and pay attention to the cultivation of college students' professional quality and individual skills, as well as let college students deeply understand the relationship between social collective and individual, so as to improve their dedication and sense of mission. We should understand the safety responsibilities of engineers for public safety, health and welfare and environmental protection, and be able to consciously perform their responsibilities in engineering practice to contribute to the country and serve the society. We should cultivate teamwork spirit and initiative, and the importance of working independently or cooperatively in the team.

4. Conclusion

In short, with the progress of the times and social development, the field of civil engineering in China has developed rapidly. In such a new era environment, it is very important to realize the reform of civil engineering survey curriculum. Colleges and universities should make full use of the curriculum ideology and politics, so that college students can master more professional knowledge points and skill levels, and they can establish correct three views and clarify their own responsibilities. In the current practical teaching of civil engineering survey course, teachers should pay attention to the application of ideological and political education in the course, cultivate excellent talents in the field of civil engineering in China, and improve the national spirit and the spirit of the times of college students.

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