

Research on teaching reform of Engineering Surveying Based on Ideological and political education

Zili Wang, Na Li

Ningxia Institute of Construction Technology, Yinchuan Ningxia, 750021

Abstract: engineering surveying course is the basic and core course of many majors. Deeply excavating the ideological and political elements in engineering surveying course can not only play a positive role in cultivating students' professional ethics and craftsman spirit, but also improve their ideological and moral quality and ideological and political level, which is conducive to cultivating students with both ability and political integrity. The comprehensive development of compound talents in the new era has laid a solid foundation. This paper briefly describes the connotation and teaching objectives of the course of Ideological and political education, and explores the effective strategies of the teaching reform of Engineering Surveying Based on the course of Ideological and political education, in order to provide beneficial reference and guidance for the ideological and political work of engineering surveying course, and help colleges and Universities realize the goal of cultivating talents with both morality and talent in the new era as soon as possible.

Key words: curriculum ideological and political education; Engineering surveying; Teaching reform; Effective strategy

Introduction

In the context of morality and talent cultivation, the main educational task of colleges and universities at this stage is to guide students to form correct values, outlook on life and world outlook while imparting professional knowledge and skills to students, cultivate students' good professional quality and ideological and moral quality, and promote their comprehensive development. Curriculum ideological and political education is an effective way to give full play to the educational role of professional courses in Colleges and universities. Taking engineering surveying as an example, this paper focuses on how to carry out education and teaching around the ideological and political concept of the course, deeply excavate the hidden and dominant ideological and political elements of the course and apply them to all aspects of the teaching content of the course. The comprehensive teaching reform of the course is the key issue of this paper, In order to effectively improve the overall teaching effect of Engineering Surveying and the quality of personnel training.

1 The connotation of Ideological and political education and the setting of teaching objectives

1. Ideological and political connotation of curriculum

Curriculum ideological and political education mainly refers to the design of rich and colorful professional ideological and political education activities based on non ideological and political courses as the main channel of Ideological and political education, so as to promote the effective integration of professional courses and ideological and political education, promote each other, and achieve the expected educational and teaching purposes. The course of Ideological and political education and the course of Ideological and political education have something in common, that is, the purpose of their education and teaching is to cultivate socialist builders and successors with comprehensive development of knowledge, ability and quality. All kinds of courses should go hand in hand with ideological and political courses to form a synergistic effect, which is the latest requirement of the state for the teaching reform of professional courses in Colleges and universities, and also creates a new situation for the teaching reform of professional courses. In order to do a good job of Ideological and political work, colleges and universities need to keep pace with the times and change according to the situation. In particular, they should follow the law of College Students' growth and development, constantly improve the working ability and level of the teaching staff, and finally solve the fundamental problems of what kind of people to cultivate, how to cultivate people, and for whom to cultivate people.

2. Ideological and political teaching objectives of Engineering Surveying Course

Engineering surveying is a very important professional basic course, which aims to guide students to master the basic knowledge and theory of Engineering Surveying and the basic methods of measuring and setting out engineering elements. Due to the obvious practical characteristics of the course, higher requirements are put forward for students' hands-on operation ability. Therefore, in the actual teaching process, teachers need to focus on the concept and basic requirements of "Ideological and political education of the course", closely follow the fundamental task of cultivating morality, determine the ideological and political teaching objectives of engineering surveying course, and implement the teaching activities of the course, So that students can be competent for the construction drawings and completion survey in the future engineering survey and design in the shortest time, and lay a solid theoretical and practical foundation for students to study other professional courses and engage in engineering construction in the future. Specifically, the ideological and political teaching objectives of engineering surveying course mainly include the following aspects: first, the goal of knowledge and ability. First, through the study of engineering surveying course, students are required to master the basic theoretical knowledge of engineering surveying, improve their practical ability and the ability to complete work and solve problems independently. Secondly, improve students' understanding of professional courses, and realize the important position and value of their major in social activities, so as to maximize students' learning motivation and enhance their confidence in their major. Engineering surveying is a very important professional basic course for many

majors. The relevant theory and practice are widely used in many industries. It helps students to deeply understand the basic concepts and connotations of engineering surveying, which is conducive to fully stimulate students' interest in learning.

Second, the goal of Ideological and political education. Around the teaching content of engineering surveying, we should fully explore the rich elements of Ideological and political education contained in the course content, especially pay attention to the design of the overall teaching system of Ideological and political education, which can play a positive role in improving the teaching level of the course; Cultivate students' sense and spirit of teamwork, and guide them to always maintain a rigorous working attitude and hardworking craftsman spirit. Engineering survey requires high practical ability of students. On the basis of mastering basic concepts and measuring principles, students should be able to skillfully use measuring instruments to complete measurement tasks independently according to requirements. At this time, students are required to pay more attention to teamwork. If they encounter bad weather, they can adhere to the completion of measurement tasks, which is the direct embodiment of strong will. At the same time, we should cultivate students' attitude of seeking truth from facts, and be conscientious and responsible in the actual work position, and be responsible for their work and themselves.

2 Effective strategies for teaching reform of Engineering Surveying Based on Ideological and Political Education

1. Strengthen teacher training and improve the ability of collaborative education

By analyzing the current situation of the ideological and political practice of engineering surveying course, it can be found that some teachers' cognition of the ideological and political education of the course is still relatively one-sided, some professional course teachers believe that professional courses are to impart professional knowledge, and the specific content of Ideological and political education can be taught by ideological and political course teachers and counselors. Similar cognition makes professional education and ideological and political education independent of each other, breaking the internal relationship between them. More importantly, it determines the complementary relationship between Ideological and political education and professional education, which is extremely disadvantageous to the improvement of teaching quality of professional courses. Based on this, in order to promote the orderly development of Ideological and political work in the curriculum, colleges and universities need to improve the teacher training system in time and carry out regular training for teachers.

First of all, teachers should continue to strengthen the study of Ideological and political theory knowledge of the course, deepen the understanding of Ideological and political education, and should actively communicate with other professional teachers and learn from experience. Especially for young teachers, they can actively learn the design method of Ideological and political teaching from experienced teachers, and understand the content of Ideological and political education of the course through a large number of searching and reading literature, And dare to put the theory into practice, actively reflect and summarize through continuous practice, so that the ideological and political teaching of engineering surveying can be carried out orderly.

Secondly, a good platform for effective communication between teachers of engineering surveying course and ideological and political course is built, and a cooperative lesson preparation system is established. In short, teachers of professional courses can mine rich implicit and explicit ideological and political elements in the teaching content of Engineering Surveying and share them with teachers of Ideological and political courses. Teachers of Ideological and political courses can give feasible suggestions on teaching. At the same time, teachers of Ideological and political courses can also expand and increase supplementary learning materials of Ideological and political elements. In the specific teaching practice, teachers should design personalized ideological and political teaching activities for students according to the teaching objectives and teaching contents on the basis of implementing the student-centered teaching concept, and output high-quality teaching resources in different links, so as to achieve the purpose of efficient classroom construction.

Finally, we should implement the plan to improve teachers' network literacy and physical and mental health within colleges and universities, establish a teacher ethics assessment and evaluation mechanism, provide accurate services according to the actual situation of each teacher, and implement the accurate assistance plan, so as to strengthen the ideological identity of teachers, so that the whole school can maintain the same ideological consciousness and behavioral consciousness, It creates favorable conditions for the efficient teaching reform of engineering surveying facing the ideological and political direction of the course.

2. Innovating teaching methods to stimulate students' interest in participation

Teaching method reform is the focus of teaching reform, which is directly related to the effect of Ideological and political implementation of engineering surveying course. In the context of the new era, there is no doubt that the traditional teaching methods may not be able to meet the needs of students' learning and development. At this time, integrating the cultivation of professionalism into the whole process of professional curriculum education and teaching is the basic requirement of college education given by the times, and also the inevitable demand of comprehensive talent training in Colleges and universities. Therefore, in the process of Ideological and political implementation of the actual curriculum, teachers need to flexibly choose teaching methods according to the actual situation, so as to fully stimulate students' interest in learning and mobilize their enthusiasm and initiative to participate.

First of all, use the intuitive teaching method of film and television introduction. In the process of teaching, teachers should base on the content of teaching materials and choose video clips that are not only related to their majors but also contain ideological and political elements as the introduction materials, so as to give students visual and auditory sensory stimuli, and instantly attract students' attention to the classroom. While letting students watch the video, they should also accept ideological education in a subtle way, While changing students' ideas, we should strengthen the ideological and political work of the curriculum. For example, when teaching the knowledge of

“basic application of topographic maps”, the author used multimedia to show the students the “Beidou navigation system”. After watching the video, the students could not help but exclaim “awesome, China”, Invisibly, it may encourage students to use their knowledge to contribute to the realization of the goal of building a socialist modern power in an all-round way, making them more determined to become advanced models and technical experts in their posts.

Secondly, the use of case teaching method. In the actual teaching process, teachers should be good at collecting real cases related to engineering survey and of great educational value to share with students. The cases can be displayed in the form of themes, such as major projects, cutting-edge science, outstanding people, etc. the sharing content can be engineering cases, people’s deeds, or classic hot events, Condense the engineering culture and engineering ethics spirit, further arouse the emotional resonance of students through vivid and moving stories and cases, enhance the true feelings of teachers and students on the socialist core values, and truly penetrate the ideological and political main lines of “craftsman of a large country” and “four self-confidence” into every link of engineering surveying education and teaching, Lay a solid foundation for the realization of the ideological and political objectives of the course.

3. Integrating teaching carriers to realize the linkage of three classes

In general, the first classroom is the main position for the implementation of Ideological and political education, the second classroom needs to be connected with the practice of education, and the third classroom mainly refers to the network teaching link. Only by continuously integrating teaching carriers and giving full play to the advantages and unique educational value of each carrier, can we truly achieve the teaching effect of $1 + 1 > 2$ Complete the ideological and political education of students at different levels to achieve the established educational purpose.

First of all, we should give full play to the practical education function of the second classroom. Taking major projects under construction as the carrier, schools and enterprises jointly build a dynamic boutique innovation and entrepreneurship practice project, which provides a good practice platform for strengthening the theoretical knowledge of engineering surveying, and teachers can find the right time to infiltrate innovation and entrepreneurship education to further alleviate the employment pressure of graduates; Build a boutique volunteer service community, and regularly carry out weekend social practice activities of “professional practice + volunteer service”, so as to guide students to always maintain a good heart and work with love.

Secondly, fully tap the cultural education function of the second classroom. With the proposal and deepening of the concept of “China dream”, quality education pays more attention to the infiltration of traditional culture, especially for engineering surveying courses, the integration of traditional culture can play a unique educational effect, so as to achieve the effect of $1+1>2$. Under the guidance of excellent traditional culture, college students will gradually form a good habit of modesty, generosity, diligence, thrift and perseverance, which is more conducive to consolidating the quality foundation of students, making them benefit the society and contribute to the country as soon as possible. On the one hand, we can build and introduce a number of online open courses of traditional culture, and actively carry out cultural education activities in combination with the actual situation of professional courses, actively invite experts and famous teachers in the engineering survey industry to enter the campus, and pass on the industry’s advanced technology and future development direction to students, so that students can know well and scientifically plan their career development in the future. On the other hand, students are encouraged to actively create and rehearse plays based on outstanding characters or deeds, build artistic publicity and display platforms on campus, build scientific and technological campuses, cultural campuses and intelligent campuses, give full play to the cultural education function of the second classroom, and enrich the ideological and political connotation of Engineering surveying course.

Finally, we should explore the educational connotation of the third classroom. The third classroom mainly uses the network as the carrier, uses a variety of advanced modern multimedia technology, vr virtual technology and modern network technology to develop and construct the Campus Online engineering survey propaganda website, and specially sets up a course Ideological and political column on the website, which is divided into different sections, such as scientific research and education, Centennial project, pillar figures, representative deeds, etc, Combined with the specific teaching content, the ideological and political work of the course is intensively publicized through the online network platform, and the ideological and political education of engineering surveying course is innovated and upgraded from the content and form, bringing completely different feelings and experiences to students.

epilogue

In essence, the course of engineering surveying contains extremely rich ideological and political elements both in theory and practice. The ideological and political course is the main position for carrying out ideological and political education, while the course Ideological and political education is an auxiliary way for ideological and political education. The two complement each other and complement each other. By integrating the ideological and political elements into the teaching activities of engineering surveying, Designing the teaching contents and methods of Engineering Surveying and working together to complete the ideological and political education of students may achieve the educational effect of $1 + 1 > 2$, and help to promote the teaching reform of Engineering Surveying in an orderly manner.

References:

- [1] Yang Lei Exploration on teaching reform of “Engineering Surveying” in Higher Vocational Colleges Based on Ideological and political education [j]The road to success, 2022 (1): 25-27
- [2] Kang Xia, Gao Xueyong Analysis on the path of Ideological and political construction of Surveying Course in Colleges and universities [j]Journal of Hexi University, 2022,38 (4): 105-110

- [3] Yaochaolong, Zhouyanhua, Zhang Jiaen, et al Exploration and practice of Ideological and political teaching of Surveying Course in Colleges and universities [j]University education, 2022 (5): 42-44
- [4] Huyang, chentingting, chenxiaohong Construction and practice of Ideological and political education in engineering survey course [j]Anhui architecture, 2022,29 (3): 103-105
- [5] Shaoyaqin, Zhouxianping, Zhang Huizhan, et al Take the engineering education certification as an opportunity to practice the ideological and political construction of "Surveying" course [j]Science and technology wind, 2020 (16): 57-58
- [6] Peng Wen Discussion on the practice of "Curriculum Ideology and politics" in engineering survey course [j]Green technology, 2018 (19): 247-248
- [7] Tanyumin Exploration on Ideological and political construction of Surveying Course [j]Surveying and spatial geographic information, 2022,45 (8): 13-14,18
- [8] Liu Hui, sulijuan, Li Juan, et al Discussion on the ideological and political construction of Surveying Course [j]Journal of Yellow River Water Conservancy Vocational and technical college, 2020,32 (4): 85-89
- [9] Liushanhong, wangcuiping, LAN Yan Exploration and practice of the teaching reform of Surveying "Course Ideological and political education" [j]Theoretical research and practice of innovation and entrepreneurship, 2020,3 (9): 34-35
- [10] Ma Dan, Luo she, Zhou, Wu Ting Reform and practice of Ideological and political teaching of Surveying Course in agricultural and forestry colleges [j]Agricultural Engineering, 2020,10 (10): 100-104
- [11] Caichangsheng, Kuang Cuilin, zoubin, et al Mining of Ideological and political elements in the basic course of Geodesy [j]Journal of higher education, 2022,8 (3): 86-89
- [12] Wujiantao Comprehensive exploration and practice of Ideological and political education and teaching reform of surveying [j]China broadband, 2020 (9): 166
- [13] Cong Kanglin, Dongchao, Liyanling Ideological and political teaching design of Surveying and mapping professional courses -- Taking "geodesy foundation" as an example [j]Wen Cun Yu Kan, 2021 (12): 113
- [14] Gao Peipei Ideological and political teaching design of leveling course [j]Modern rural science and technology, 2021 (12): 85-86
- [15] Zhangjingzong Exploration of Ideological and political education in the practical teaching of Engineering Courses -- Taking "Surveying" series courses as an example [j]Education and teaching forum, 2022 (3): 65-68