



Teaching Design of Integrating Ideological and Political Elements into “Safety System Engineering”

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Abstract. This paper introduces the ideological and political teaching design of “security system engineering”, in the use of modern teaching methods in class, before class, after class in the three teaching links of ideological elements, according to the spirit of ideological and political work in colleges and universities and the need of professional personnel training, in discipline construction, to give full play to the ideological and political education function of professional courses, improve students’ safety awareness and practical ability, and shape correct career outlook and values.

Keywords: Safety System Engineering · Course Ideological · Political Education

1 Introduction

In 2016, General Secretary Xi Jinping stressed at the national ideological and political work conference that classroom teaching should be used as the main channel, and all kinds of courses should go together with ideological and political theory courses to form a synergistic effect. Comprehensively promote the ideological and political construction of the curriculum, and help students shape the correct world outlook, outlook on life and values. Based on this, the safety engineering specialty in conjunction law of ideological and political work in colleges and universities, in the new era of khalid ents idea as the guidance, fully grasp the course characteristics, depth excavation of teaching resources, the overall design of teaching process, the correct concept of mastery to specialized courses in the learning process, make contributions to cultivating qualified socialist new people.

2 Course Introduction

Safety system engineering is a required professional basic course for undergraduates majoring in safety engineering. It is a necessary theoretical basic course for students to learn professional knowledge and engage in scientific research and work of their own

specialty. It is one of the entrance examination subjects for master of safety engineering in most colleges and universities.

The task of this course is to enable students to master the basic theory, principle and analysis method of safety system engineering. By identifying system risk factors, analyzing and evaluating system safety, and proposing technical measures to control risks and eliminate accident hidden dangers, students can deeply master various system hazard analysis methods and their application in safety engineering from the perspective of system engineering. In order to obtain the necessary professional skills training, to engage in safety professional work and scientific research to lay a solid foundation.

2.1 Curriculum Ideological and Political Overview

“Curriculum ideological and political education” is a new ideological and political theory teaching method, that is, through the integration of Ideological and political course and other courses, so as to give play to the advantages of multi course teaching, further improve the educational effect, the transfer of correct values is complemented by the imparting of knowledge. Now, the teaching design of “Course Ideological and political” is carried out with the theme of “safety system engineering”.

3 Deep “Integration” of Ideological and Political Education and Classroom

3.1 Instructional Design

According to the changes in countries and societies, more and more students with safety science, safety engineering and technology, professional quality and morality are needed. Therefore, the teaching content design of safety system engineering, a professional course of safety engineering, is designed. The specific teaching design is shown in Fig. 1.

1. Preparation before class

Abundant materials are the basis of teaching content design. Teachers can improve the teaching syllabus and teaching ppt by collecting multi-level teaching materials such as the latest laws and regulations knowledge, skills, science and technology frontier, national policies and safety related policies required in the system safety analysis and evaluation. Students will pass on the learning materials before class, according to the teacher’s requirements, students preview and feed back the problems they encounter to the teachers.

2. Classroom teaching

Review the content of the last lesson and import the new lesson. By putting forward the content of safety evaluation, we can understand the preview of students, so as to better complete the course. When teaching safety evaluation methods, the latest

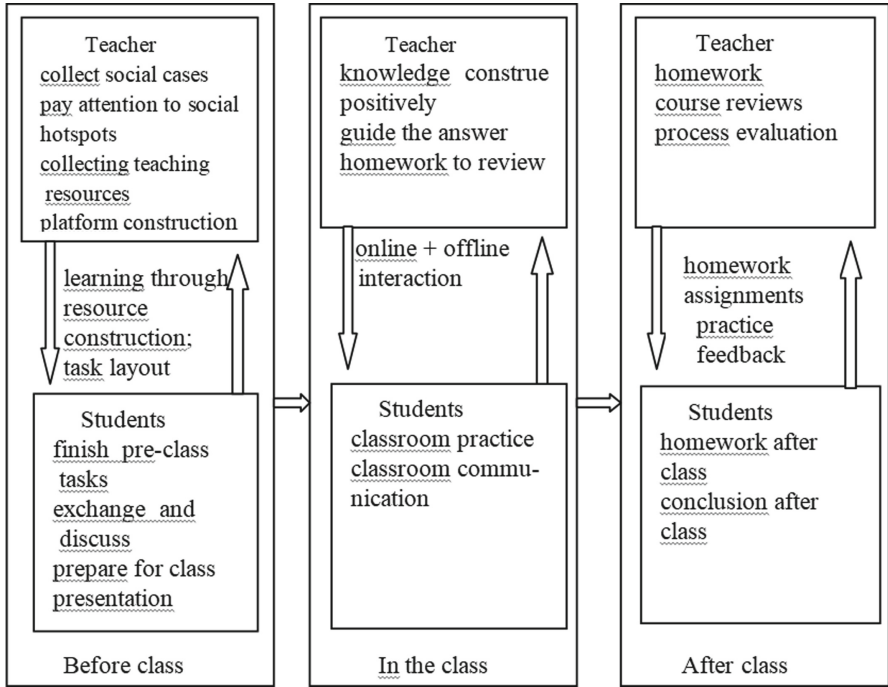


Fig. 1. Teaching design

safety laws and regulations in China, relevant situations at home and abroad are introduced, and scientific research results are integrated into teaching. In order to make students realize that they should have professional quality and craftsmanship spirit when they are engaged in the evaluation. According to the specific situation of each enterprise, they should first carry out on-the-spot investigation and evaluate according to the different characteristics of the enterprise. It should also have professional ethics. When the enterprise does not comply with the regulations, it should adhere to the principle and can't change the conclusion privately. For this profession, the sense of safety responsibility is more important than safety knowledge. For example, the "3.9" fire accident of Zhongxin building in Chang'an District, Shijiazhuang City, Hebei Province, with an area of 15455 m² and a direct economic loss of 33.2696 million yuan. The cause of the accident was that the cigarette butts of the staff in the building caused the paper packaging of the plaorm, which led to the fire. After the accident, there were disputes in the confirmation document. The fire accident was combined with the laws and regulations, guide students to analyze the negligence of the management personnel in the accident case, think about the causes of this typical fire and explosion accident and the controversial phenomenon, and the countermeasures taken by the party and the government on the implementation of safety work at this stage. At the end of the course, summarize the class and ask questions. According to the students' real-time feedback, we can understand the students' mastery of the classroom.

3. Summary and feedback after class

In order to further deepen the students' ability to use knowledge, students are required to think deeply about the following problems after summarizing the knowledge points in the classroom: (1) the role of safety analysis of dormitory? (2) Open topic: such as: how to do dormitory safety evaluation report? Students can submit answers in the learning pass, and communicate with teachers through online + offline ways.

3.2 The Integration Method of Ideological and Political Education

In order to achieve the "trinity" training goal of value leading, knowledge transmission and skill training, the following six combination methods, namely knowledge points, classroom discussion and case analysis, are adopted to organically integrate with ideology and politics:

1. Use the combination of online platform and ideological and political education knowledge base

With the development of the social, we can make full use of the online teaching platform to release the latest policies and regulations of the party and the state on security, and the handling of emergencies on the platform, so as to establish a knowledge base and make full use of the online platform. For example, in view of the sudden earthquake, take "the most outstanding headmaster Ye Zhiping" as an example to show the importance of prevention. More than 2300 teachers and students of the school evacuated orderly, and it took 1 min and 36 s to escape safely without any casualties, creating a Chinese miracle, so as to better understand the importance of prevention in China's current new policy. Also better stimulate students' self-confidence and sense of responsibility in learning professional knowledge, through the combination of online and offline, improve students' access to ideological and political content.

2. Combination of knowledge points and recessive ideological and political elements

From "knowledge of safety in China" to "knowledge of safety in China" to "knowledge of safety" in China and abroad. Through classroom teaching, students unconsciously identify with and pride in the concept behind "safety, life" and other safety engineering majors, and complete the purpose of educating people from professional knowledge to "Ideological and Political Courses".

3. Classroom presentation + real time interactive guidance after class

In addition to the integration of knowledge points and ideological and political content in the classroom, we can also interact with students after class. In the learning process, we can learn how to solve problems, that is, encounter problems, analyze problems, solve problems, summarize the general situation of these four steps, and apply them to students' learning, so as to reduce frustration in the process of university learning, and improve learning motivation and self-confidence. At the end of graduation, students are asked to answer questions about career planning, ability needs, and further education. Although teaching is staged, it is continuous to accompany their growth.

4. **Accident analysis + teaching method guidance**

Taking the latest international, domestic and nearby security incidents as an example, this paper guides students to analyze and discuss, through to the side of the accident, the students get to know the importance of work safety in production and living, responsibility consciousness also slowly in the bottom of heart, when many students see explosion, fire accident, feeling the terrible accident, sorry the fragility of life, but also realized using the modern security technology to prevent the accident is an important part of the security work, in the process, The students gradually establish correct values and sense of responsibility, which also stimulates the students to respect life and devote themselves to the cause of safety.

5. **Case study + Hot Video Fusion**

Part of the teaching content can be taught by case method to guide students to pay attention to and think about safety issues with the knowledge they have learned, and cultivate their sense of social responsibility. Through the video, students can understand the social hot issues, such as the fire in the hardware warehouse in Hebei District of Tianjin on March 23, the fire department sent dozens of fire engines to put out the fire, and the residents around took active measures to show their patriotic feelings and the importance of the party and the state on people's lives and property. Through the discussion, we also let the students realize the deficiencies in the safety work in the case and the illegal behaviors in the production, guide the students to realize that not only to learn professional knowledge, but also to strengthen the study of the "safety production law", guide the students to establish the idea of "learning, understanding and abiding by the law", understand the rights and obligations of safety workers, and exercise their "rights" to safeguard public safety. To ensure the safety of people's lives and property.

6. **Group discussion + joint discussion**

The teacher gives a debate about the security problem in the new era, and the students discuss it. If a team puts forward a new era of new coronavirus epidemic situation, China, with the development concept of "people-oriented and life first", starts with little knowledge of the virus at the initial stage and is silent, then the vaccine is popularized free of charge in the later stage, and the regional risk level is divided. According to different risk results, different prevention and control measures are adopted to develop production orderly under the condition of ensuring safety. To a great extent, it ensures the personal safety of the people. During the discussion, we all felt China's advantages and strength, and inspired students' national pride and self-confidence. From the prevention and control of epidemic situation, we also reflected the importance and effectiveness of analysis evaluation comprehensive management in the system analysis method.

4 **Conclusion**

In this paper, through the deep excavation of safety engineering course safety system engineering, the latest changes in domestic and foreign safety, hot cases, advanced person cases, patriotism, team consciousness, professionalism and other ideological and political elements are skillfully integrated into classroom teaching through case analysis,

group discussion, online knowledge base and other ways. Let students learn professional knowledge at the same time, can establish correct values, develop good professional ethics.

In addition, teachers should cultivate students' self-restraint and responsibility in politics, and cultivate students' self-cultivation and self-cultivation. Teachers themselves should have profound theoretical foundation to attract students, but also use their own personality charm to set a correct example for students.

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