



Curriculum Design Exploration of Mapping Practice of Auto Parts Integrated Ideological and Political Education Goals

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Abstract

To implement General Secretary Xi Jinping's important expositions on education, to implement the fundamental task of building morality and cultivating people in colleges and universities, teachers of professional courses must teach scientific knowledge and skills. At the same time, we will carry out the shaping of students' ideological and moral character and the cultivation of socialist values. Taking the "Mapping Practice of Auto Parts" course of computer science and technology major as an example, it explored the organic integration and implementation of the ideological and political education goals in the design of the curriculum syllabus, and explored terms of teaching goals, teaching content and teaching methods, aiming to innovate education and teaching methods, make good use of the situation, and cultivating talents with all-round development of morality, intelligence, body, beauty and labor.

Subject Areas

Mechanical Engineering

Keywords

Mapping Practice of Auto Parts, Ideological and Political Education Goals, Ideological Education

1. Introduction

The connotation of "course ideology and politics" can be understood as the ideological and political education practice activities carried out by relying on professional courses and general courses, or integrating ideological and political education into the educational practice activities of professional courses and

general courses. Teachers of professional courses in colleges and universities, while shouldering the sacred responsibility of preaching, teaching and solving doubts, also have the important responsibility of guiding students to grow up healthily. The most important guideline for the teaching of professional courses is the curriculum syllabus. In order to achieve the goal of all-round education, how to organically integrate professional technical knowledge with the ideological and political elements of the curriculum in the design of the curriculum syllabus is a topic that college teachers need to explore and practice for a long time [1].

“Mapping Practice of Auto Parts” is a compulsory technical basic practice course for vehicle engineering majors in engineering colleges and universities. It integrates the measurement, drawing and reading of auto parts, masters the basic skills, basic steps and methods of measurement and drawing, and lays the necessary foundation for cultivating students’ spatial thinking ability and drawing skills. At the same time, it is an indispensable foundation for learning follow-up courses, completing course design, and graduation design [2].

The original curriculum syllabus rarely contains curriculum ideological and political content and educational goals [3]. There are the following problems and difficulties in implementing curriculum ideological and political content.

1) Professional course teachers must ensure that ideological and political education does not repeat and is consistent with this course while teaching their professional knowledge.

2) The knowledge points are organically integrated and fruitful. At the same time, ideological and political education is fragmented and lacks systematicness and coherence when developing curriculum ideology and politics.

3) “Valuing morality over virtue” exists generally among students

In order to cope with the above changes, professional course teachers must make bold explorations and practices in teaching objectives, teaching content, and teaching methods, and integrate ideological and political education goals into teaching design, so that curriculum ideological and political courses can be used as an appropriate supplement to ideological and political courses.

2. The Specific Implementation of the Goal of Ideological and Political Education in Curriculum Design

2.1. The Goal of Ideological and Political Education

When the curriculum design was revised, the goal of ideological and political education was added. It is broken down into the following aspects.

1) Through the introduction of the instructor, cultivate students’ awareness of engineering ethics, inspire students’ great-country craftsmanship spirit of excellence and the mission of serving the country with science and technology.

2) Through literature search and group cooperation, students can develop the ability to explore the unknown and teamwork ability.

3) Develop students’ hands-on ability.

4) Through the measurement of parts size, cultivate the spirit of craftsmanship in students.

2.2. The Content and Method of Ideological and Political Teaching

According to the content of the knowledge unit of “Mapping Practice of Auto Parts” course, the concept of “implicit ideological and political education” is reasonably integrated, which is intended to make students educated in a permeable and subtle way. According to the main line of the course teaching content, the ideological and political teaching content is as follows.

1) Opening report

As a practical course, this course sets up an opening report. By hiring experts from SAIC Group as instructors to make a mobilization report, explain to students the development of China’s auto dealership and the tools, methods and significance of parts surveying and mapping. Specific ideological and political integration points include the following aspects: a) The development history of my country’s automobile industry; b) The growth process of outstanding engineers in the automotive industry; c) Development history of auto parts surveying and mapping technology. Through this part of ideological and political teaching, we try to let students understand the hardships of independent research and development; cultivate students’ patriotism, dedication and national self-confidence.

2) Disassembly of automobile parts

In the disassembly of auto parts, through the teaching methods of information media and laboratory visit experience, explain to students the name, structural shape, use, working performance, working principle, assembly sequence of main parts and assembly relationship of auto parts assembly entities. Specific ideological and political integration points include the following aspects: a) Step-by-step and modularize complex problems in the process of component disassembly, similar to life planning; b) The principle of “the difference is a thousand miles” in the process of component installation; c) The ingenuity of component design is the result of countless design modifications by engineers, reflecting the spirit of innovation and craftsmanship. Through solidarity and cooperation, stimulate students’ independent innovation ability, cooperative spirit and scientific spirit.

3) Drawing process of the assembly drawing

During the drawing process of the assembly drawing, through the form of national standard review and classroom group discussion, students determine the ideas and steps of drawing assembly drawings. Specific ideological and political integration points include the following aspects: a) By laying out and drawing assembly diagrams, understand that the learning process is the process of building a cognitive structure; b) By continuously optimizing the assembly drawing to reflect the assembly process of parts and components, the analogy to the cognitive structure can be continuously expanded; c) Understand the planning and design process of a system from scratch, learn the thinking and ideas of problem-solving, and further extend to the improvement of problem-solving ability.

Through this part of ideological and political learning, we try to guide students to establish life plans according to local conditions.

2.3. Test of Ideological and Political Effects

A questionnaire survey is conducted before the end of each semester to understand the students' knowledge and ideological trends in real time, including students' opinions and suggestions to the teachers, timely adjust the teaching methods, and serve students in an all-round way.

Through the whole process of teaching that incorporates the goal of ideological and political education, teaching process has achieved good results.

Teachers put curriculum ideology and politics in professional knowledge points to reflect, extend, and moisten, so that students can change from passive acceptance to active cooperation, and then to active interaction. The questionnaire at the end of the period showed that 93.5% of the students highly recognized the "Mapping Practice of Auto Parts" course.

3. Conclusion

The goal of ideological and political education has been integrated into the syllabus of "Mapping Practice of Auto Parts" course, and good teaching results have been achieved. The practice and exploration of teaching objectives, teaching content and teaching methods reflect the transformation from ideological and political courses to course ideological and political courses, as well as the practice of educating people in all staff, whole process and all-round education.

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Conflicts of Interest

The authors declare no conflicts of interest.

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