

# Discussion on ideological and political construction of graduate specialized courses under the background of new engineering

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**Abstract:** In order to promote the cultivation of new engineering master talents, this paper summarizes some problems in the ideological and political work of domestic new engineering master courses, lists the deficiencies in the system and practice level, and some measures for the ideological and political teaching and reform of domestic graduate courses, and analyzes its positive effects. Finally, it introduces some practices in the construction of curriculum ideological and political construction in the author's unit. This article under the background of new engineering graduate courses ideological and political issues and the introduction of the domestic curriculum ideological and political construction experience and measures, as well as the author's exploration of the curriculum ideological and political construction, for the domestic university graduate courses ideological and political construction provides a reference.

**Key words:** New engineering; Graduate education; Curriculum thought and politics; Ideological and political construction; Three full education

## Introduction

The construction of "new engineering" is an educational strategy formulated by the state to adapt to the new environment of international and domestic economic and social development, which responds to the new problems of higher education in the development of engineering education in the new era with "new thinking, new pattern and new direction". The ideological and political construction of "new engineering" curriculum should also be based on the new era, and fully tap the ideological and political elements contained in "new engineering" curriculum. Since 2004, the Central Committee of the Communist Party of China, The State Council, the Ministry of Education and other departments have issued nearly 20 guiding documents and notices, providing theoretical basis and action guidelines for the implementation of ideological and political courses in colleges and universities. Under the concern and guidance of the central Government, the Ministry of Education and other higher departments, the reform of ideological and political teaching of graduate courses in colleges and universities has been carried out in an all-round way. Although a great deal of exploration has been carried out in the connotation and practice of ideological and political education in professional courses for graduate students, there are still some problems that are not systematic and comprehensive.

## I. The problems existing in the ideological and political construction of graduate specialized courses

1. The main problems existing in teachers' implementation of curriculum ideology and politics

(1) Lack of cognition and initiative. Teachers of professional courses have traditional educational ideas, lack of understanding of the connotation of moral education, lack of initiative in curriculum ideological and political construction, and the level of ideological and political education is not high. As a result, the content of ideological and political teaching is not novel, attractive and inspirational, and cannot catch up with the demand for talent training and the updating speed of professional knowledge in the information age.

(2) Superficial case design of ideological and political teaching in graduate courses. Under the background of new engineering construction, the thinking and politics of professional courses should have a broad vision, a broad mind and a large knowledge reserve. However, in the practice of ideological and political teaching reform in graduate courses, some teachers are not careful enough in the content design of ideological and political teaching, and the ideological and political cases are directly taken from various news reports, lacking their own dialectical understanding.

(3) The timeliness of ideological and political teaching cases is not strong. Faced with the new stage and new changes, the ideological and political education of graduate students in some colleges and universities has not been innovated, but still continues the traditional educational methods and focuses on preaching and indoctrination.

(4) Lack of humanistic quality education. Knowledge imparted and ability training gradually occupy a dominant position, and the position of humanistic education in higher education is gradually declining. However, the lack of humanistic quality education will greatly affect the effect of ideological and political education for postgraduates. Because the educational function of cultural influence is ignored, the attractiveness and vitality of ideological and political education will be weakened.

(5) The method is relatively simple, and the initiative of graduate students to participate in the ideological and political teaching reform practice has not been stimulated. The lack of teachers' guiding consciousness, and the lack of graduate students' desire and ability to actively explore lead to the failure of graduate students' enthusiasm in curriculum ideological and political teaching.

2. The main problems existing in the school's curriculum ideological and political construction

(1) The goal of student training is not clear and the goal is not implemented in place. The ideological and political education of postgraduate courses should not only anchor the goal of "cultivating morality and cultivating people", but also not directly copy the

ideological and political education mode of lower-level courses, nor make no difference in the ideological and political implementation process and methods of professional master's and master's degrees. It should conform to the objectives, levels and types of ideological and political education of postgraduate students, and form a synergic education effect with the ideological and political courses of postgraduate students.

(2) The mode and level of graduate education are subject, and the ideological and political goals of the curriculum are correspondingly dwarfed. The expansion of enrollment leads to the increase of students year by year, and the batch admission of postgraduate students is bound to result in batch and extensive training, and the decline of teaching quality, which once caused the incomplete theoretical knowledge of postgraduate students, the lack of practical ability, the improvement of ideological level and consciousness, and the serious lack of innovation consciousness, and the curriculum ideological and political education and scientific research education are greatly reduced.

(3) Attaching great importance to the publication of academic papers and neglecting ideological and moral construction. When it comes to the quality control of published journal papers and master's theses, some graduate supervisors give less guidance and revision to students' theses, and the review is not strict. A few students tamper with experimental data, and some master's theses fail to meet graduation requirements but still pass the exam.

(4) The ideological and political evaluation system of graduate courses is not mature. In the organization and implementation of teaching reform, there are generally problems such as "attaching importance to project establishment, neglecting research and lacking evaluation" in curriculum ideological and political teaching reform. Managers tend to focus only on reports and some quantitative data indicators, but do not pay attention to reform process management and in-depth evaluation and promotion of reform effectiveness, and lack corresponding standards in various aspects such as what goals should be achieved, and what depth and breadth should be implemented in the ideological and political reform of postgraduate courses.

## II. Measures for ideological and political reform of graduate courses in China

### 1. Measures for ideological and political reform of courses at the management level

(1) The school should clarify the training objectives of postgraduate education. From the perspective of discipline construction concept, the traditional mechanical discipline graduate training emphasizes the construction of theoretical knowledge system, while the problem-oriented new engineering graduate training highlights the internal connection between theory and practice and emphasizes the ability to solve complex problems in engineering practice. Only by clarifying the professional direction, training type and training objectives, can the curriculum ideology and politics of professional courses be more organically integrated with professional courses, case selection and ideological and political elements extraction be targeted, so as to make things silent.

(2) Education authorities and schools should strengthen teachers' ideological and political awareness and provide convenience and services for teachers. At the same time, teachers should learn to tap the ideological and political resources of "new engineering" courses to ensure the organic integration of professional knowledge and ideological and political education.

### 2. Curriculum ideological and political reform measures at the executive level

(1) Continuity, balance and vividness should be reflected in the direction and principle of ideological and political implementation of graduate professional courses. Curriculum ideological and political reform should be loyal to practice, adhere to the "five education at the same time", so as to highlight innovation and exploration, strengthen problem-oriented, and adhere to student-oriented.

(2) Members of the teaching team of professional courses should consciously improve the ideological and political teaching and research ability of "new engineering" courses, improve the education ability of precise "drip irrigation", and build a virtual teaching and research room, collect high-quality course resources, and build a teaching community. All professional courses should maintain a channel and plant a responsible field respectively, achieve new achievements in ideological and political construction, and promote the connotative development of new engineering construction.

(3) In the practical aspects of daily ideological and political education, teachers should broaden the connotation of teaching and educating people, and improve the ideological level of postgraduates from all aspects.

## III. Practice of ideological and political construction of specialized courses for graduate students in our university

### 1. Overall construction strategy and organizational implementation plan

The ideological and political teaching of mechanical graduate students in our school is designed for three ideological and political implementation places of professional courses, practical courses and scientific research links, mainly from the aspects of ideological and political ideas, objectives, contents, cases, integration and other aspects, and to strengthen the connotation construction through curriculum ideological and political construction, ideological and political teaching reform projects, ideological and political papers published, participation in ideological and political conferences and other measures.

### 2. Specific methods of curriculum ideological and political construction

(1) Professional curriculum synchronous integrated design and division of labor cooperation. Combining with the curriculum characteristics and thinking mode of the new engineering major, it is necessary to systematically consider the education goal of the professional course design when formulating the talent training plan, and then decompose the specific ideological and political teaching goal of the basic course, the professional course and the practical course, and the achievement degree of the education goal and the graduation

requirements. Clarify the respective responsibilities of the faculty, teaching and research section and professional course teachers, so that the ideological and political education goals of various courses are clear, the task division is clear, and the ideological and political theory courses are in the same direction, the same frequency resonance, forming a synergistic effect.

(2) Go forward separately and organize and implement it carefully. According to the ideological and political teaching objectives of specific courses, formulate ideological and political construction plans for each course. Taking the course of Advanced Manufacturing Technology as an example, taking the ideological and political goals of the course as the center, in the content of each chapter or theme, search well-known figures, well-known enterprises and well-known events in the field through the theme keywords, dig out the hidden ideological and political nutrients behind the enterprises, people and events, and in the process of knowledge transfer, By watching short videos, students' discussion and evaluation of events, teachers' summary and other forms, to form value guidance and touch for students.

(3) To point with the surface, gradually covering. At present, after years of curriculum ideological and political construction, has completed the mechanical system fault diagnosis theory and method, advanced manufacturing technology and other 4 courses ideological and political demonstration courses, in the postgraduate course ideological and political and training mode education reform Chongqing key project 2. After the department synchronously designs and divides the professional courses, each course goes forward separately according to the construction plan, carefully organizes and implements, and has now realized the ideological and political education pattern with point and surface, and gradually covers all aspects of the course.

#### IV. Summary

According to the requirements of ideological and political construction of the curriculum, the mechanical major of the school has achieved the professional courses including ideological and political courses, team teachers teach people, and class cases with characteristics. The integration of ideological and political elements into the teaching of professional courses adds vivid humanistic and social science characteristics to the original boring class, which is extremely fashionable and interesting. It is conducive to stimulating the interest of graduate students in learning, expanding their thinking and vision, improving their ideological quality and humanistic and social science literacy, and achieving the effect of ideological and political education that moistens things in silence.

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