# **Practice and Thinking of Ideological and Political Construction in Engineering Graduate Education Course**

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*Abstract:* To promote the ideological and political construction of engineering graduate education courses, we should strive to improve the ideological, effective and interesting nature of the courses. This paper takes the course of "Comprehensive Quality cultivation and Practice of graduate students" as an example, discusses the "3 + 3 + 3" curriculum system of a series of special lectures for engineering graduate students, and discusses the implementation path of ideological and political construction of engineering graduate education courses, so as to realize the value guidance and personality shaping of engineering graduate students.

Graduate education is an important part of national education development and plays an irreplaceable role in cultivating high-quality innovative talents. From the perspective of the development of global higher education, the level of graduate education is an important symbol to measure the educational strength of a university and a country, and a key factor to realize the construction of a strong educational country. In 2020, the Ministry of Education, the National Development and Reform Commission, Ministry of Finance issued "about accelerating the development of new era graduate education reform opinion", stressing the reform of graduate training mode, improve training quality, to meet the needs of the current social development, improve the level of graduate ideological and political education, provide strong support for the development of graduate education. Open in order to better promote the new era implementation of socialism with Chinese characteristics, we should strengthen graduate course education teaching, establish a batch of demonstration universities, launched a series of demonstration course, select a batch of excellent teaching ability of teachers and team, and establish a batch of demonstration course education teaching research center. In recent years, in order to implement the fundamental task of cultivating people by virtue, colleges and universities have actively promoted the reform of ideological and political education for graduate students, and have made remarkable achievements in curriculum construction and exploration. This paper will focus on the ideological and political construction of engineering graduate courses, and deeply discuss its characteristics, key points and implementation methods, in order to provide students with a more comprehensive ideological and political literacy.

# **1.** Overview of the ideological and political construction of engineering graduate education courses

Curriculum thinking and politics aims to take moral education as the core and integrate it into every part of the curriculum system. It aims to cultivate students' moral character and let students establish a correct outlook on life in their daily life. We hope that in this way, students can better understand and apply ethics, and develop a better personality. We hope that this method will help students better integrate into society and make our learning more three-dimensional. Due to the unique nature of engineering graduate education, its ideological and political construction is particularly urgent, essential and crucial.

#### 1.1 Urgency of ideological and political construction of engineering graduate education courses

Contemporary engineering graduate students are full of enthusiasm for the motherland, firmly follow the group's correct path, they are full of vitality, hard work, quick thinking, is a trustworthy and hopeful generation. However, because some schools pay too much attention to skills training, they ignore the theoretical study, and only pay attention to the professional education, thus ignoring the ideological and political education. Due to the complexity of today's world, many students with master's degrees in engineering often lack systematic thinking and cannot view problems from a macro perspective when dealing with various international situations, social phenomena and online information., And it cannot be considered from a historical perspective. Application of historical materialism and dialectical materialism concept, as well as the relevant practical experience, we should strive to improve the values of engineering graduate students, let them have more profound historical cognition, broader system thinking ability and more open world vision, to cultivate a batch of good political consciousness, love the motherland, responsible high-quality engineering and technical personnel.[1]

# **1.2** The Necessity of ideological and political construction of engineering graduate education courses

In the past, engineering graduate education focused on professional learning and skill improvement. However, due to the closure of the learning environment, many students neglected the learning of humanities and social sciences, resulting in undesirable phenomena such as "emphasizing professional skills over comprehensive accomplishment" and "emphasizing academic over humanities". In order to better promote the all-round development of the development of engineering graduate education, we should strengthen the course education construction, the theory of marxism and scientific spirit into the teaching, in order to help students to better understand, analyze and solve problems, so as to improve their humanistic quality, this move has very important practical significance.

# **1.3** The importance of ideological and political construction of engineering graduate education courses

With the rise of new engineering, colleges and universities should take the improvement of graduate professional skills and academic cultivation as their top priority. Their ability level will directly affect the success or failure of the country's high-level scientific and technological self-reliance development strategy. Therefore, colleges and universities should not only strengthen the training of technical professional skills, but also carry forward the socialist core values, combine the research methods and theories of humanities and social sciences, encourage graduate students to

establish correct moral concepts, enhance their theoretical thinking ability, in order to make contributions to the future scientific and technological innovation. Through systematic learning and practice, cultivating students' methodology and critical thinking can effectively help them to better explore, deeply explore and solve problems, thus greatly enhancing their creativity. In the new era, "combined with the characteristics of the major to promote the ideological and political construction of courses. The "Guiding Outline for Ideological and Political Construction of Courses of Higher Learning" clearly points out that the ideology, effectiveness and interest of engineering graduate education courses should be strengthened, so as to promote its development. Therefore, this paper holds that to improve the quality of curriculum ideological and political construction, we must start from many aspects, in order to better meet the needs of students and promote the all-round development of students.

First, in order to improve the ideological nature of engineering graduate education courses, professional teachers should, according to the characteristics of engineering disciplines, and in order to better promote the integration of science and technology, we should deeply study related disciplines and interpret them from different perspectives and at different levels. In today's social environment, we should try to extract the ideological connotation of various engineering courses. As a teacher, we should give full play to our knowledge reserve, life experience, professional ethics, academic level, personality characteristics and communication skills, to provide students with a beneficial ideological and political education, so that they can love these courses more, and can more actively participate in these activities. I fully understand the teacher's teaching philosophy.

Second, in order to better improve the effectiveness of engineering graduate education course, we should pay attention to cultivate the students' ideal faith, to love the group, patriotic, love socialism, love the people, love the collective as the core, efforts to enhance their political identity, the feelings, cultural accomplishment, the rule of law consciousness and moral cultivation, and make full use of the convenience of the network information and diversity, let them better in the learning process of society, better play their potential. Strengthen the ideological and political education, so that students can better understand and master the socialist core values, so as to better serve the social development and national construction. Through systematic education, we will deeply explore the current hot issues, carry forward the Chinese dream of the great rejuvenation of the Chinese nation, spread the core socialist values, promote the construction of the rule of law, promote labor and employment, improve the level of mental health, carry forward the excellent traditional Chinese culture, and improve the effectiveness of the ideological and political construction.

Third, in order to improve the interest of engineering graduate education courses, we should take more measures, such as adopting the "post-1995" and other new teaching modes, to make students make themselves more interesting and interesting in class, stimulate their enthusiasm and initiative, and cultivate their self-awareness and autonomy. In order to better cultivate the professional ability and thinking characteristics of engineering graduate students, we should design an appropriate teaching mode. In terms of course content selection, viewpoint interpretation, case sharing and atmosphere creation, students can have more autonomy and let them take the initiative to participate in classroom teaching, so as to improve their interest in and creativity in the ideological and political construction of the course. In order to better promote the new era of engineering graduate education course education construction, "graduate comprehensive quality cultivation and practice" around the first national curriculum education demonstration project in practice exploration, through the humanities and social science literacy and natural science spirit organic fusion, build "3 + 3 + 3" course system, to enhance the ideological construction, effectiveness, interesting, improve the teaching quality, provide students with more interesting learning experience, so as to better realize the goal of course ideological construction. Through the effective curriculum setting, we can better cultivate talents.

# **2.** The construction path of ideological and political construction of engineering graduate education courses

#### 2.1 Build a "virtuous" course section

In order to better promote the construction of curriculum thought, engineering colleges have taken targeted measures, with "the cultivation and practice of postgraduates' comprehensive quality" as the core, to deeply explore the connotation of ideological and political education, so as to cultivate students' cultural confidence, political identity, feelings of home and country, scientific spirit, civilized cultivation, etc., so as to enable them to master knowledge and skills on the basis of, More firmly pursue their own beliefs, forming good moral character and personal characteristics; It has built and condensed three major courses: "Bearing the Historical and Cultural Pulse", "Knowing the way to govern a big country" and "Cultivating one's morality and virtue". It integrates "internal cultivation and external governance to temper one's life" across disciplines. Article to carry the road, to the cultural people "" manufacturing in a big country, the foundation of a strong country" "the vastness of the ocean" "automobile new" "Fujian education, from ancient times to the present" "etiquette cultivation, cultural communication" and other special lectures and off-campus practice experience.

#### 2.2 Design the course content of "with material"

Through an in-depth understanding of the age, experience and knowledge reserve of graduate students, we can explain the courses more accurately and make them more readable. At the same time, we should also pay attention to cultivating their interest in learning, so that they can understand the purpose of the course a deeper, so as to improve the effectiveness of the course more effectively. Therefore, in the ideological and political construction of engineering graduate education courses, three key areas should pay special attention to: "What do I want to teach" aims to cultivate high-quality talents with virtue, wisdom and innovative spirit, while "moral education" is committed to improving the interest of the course, but it will not be influenced by the outside world, but adheres to the practice-oriented pursuit of real educational effect.

The teaching of "what students are concerned about" should be constantly innovated to adapt to the current economic, political, cultural and other development of the country, and should constantly change with the needs of students to meet their needs.[2]

Through "what students lack", we can help students better understand and cope with their study and life. At the same time, we should also cultivate their systematic thinking ability, good moral cultivation and the spirit of the courage to accept challenges. In the process of ideological and political education, we should let students think about the world with a scientific attitude, analyze problems with dialectical thinking, and look at social phenomena and events with Marxist thought. In order to cultivate the students' innovation consciousness, innovative thinking and innovation ability, "graduate student comprehensive quality and practice" course design should take content as the core, carefully selected the graduate attention hot issues, and through the "inside outside, refined life" "to carry, to culture" series, "the beauty of words", "the beauty of music" "the beauty of poetry" introduction, guide students to understand the Chinese excellent traditional culture, enhance national pride, "four confidence" faith, improve aesthetic ability, artistic accomplishment and cultural accomplishment. The series of lectures on "Great Country Diplomacy" and "Fujian Education from ancient times to the present" aims to help students deeply understand the complexity of great country governance and stimulate their enthusiasm and attention to national development, social progress and national rejuvenation." Country manufacturing strong base" and "etiquette accomplishment, cultural communication" lecture series, aims to explore "made in China" "built in China" "the new" of "ocean" "professionalism and spirit" and "etiquette culture, cultural communication", in order to improve students' engineering ethics consciousness, inspire their great spirit, and help them to improve personal quality, improve personality development. Combined with professional education and ideological and political education, we can help students to better understand and master all kinds of professional knowledge, and cultivate their rigorous scientific attitude and lofty humanistic accomplishment. In this way, we can effectively guide the ideological and political graduate students, so that they become a valuable talent.

### 2.3 Innovate the "interesting" course forms

First, the "interactive" course adopts a three-dimensional and orderly interaction mode, allowing teachers and students to participate in and respond positively. "Graduate student comprehensive quality cultivation and practice" course adopts "double synergy + synergy between teachers and students" mode, each class is represented by the student representatives according to the teacher, choose their most interested in theme, usually please three student representatives, in order to stimulate students' interest in learning, improve the learning effect. Each student will share the teaching with the lecturer and 1-2 auxiliary lecturers, so as to give full play to the students' subjectivity and collaboration ability. Through the three-step teaching mode of "student representative keynote speech + teacher theory elaboration + main and auxiliary teacher case sharing", taking "small story" as an example and "big feelings" as an example, relevant questions are carefully selected before class, and the psychological needs of the audience are deeply explored in class. By using allusions to build "multiple" ideological and political courses, let the students unconsciously accept the influence of socialist core values, second, to expand the "multiple" course platform, make full use of external teaching resources and Internet technology, rich course content, improve teaching means and methods of, make ideological and political courses more vivid and interesting, so that students can better understand and master the knowledge. "Graduate student comprehensive quality cultivation and practice" course aims to extend to the classroom teaching, through the red culture baptism social practice, realize the synergy, and the network as an important part of classroom teaching, with material release, thinking, student homework, homework correction and evaluation, make course teaching more rich and colorful, more effectively achieve the goal of ideological and political education. Third, the ideological and political teaching team of the "collaborative" course is composed of four teachers from different academic backgrounds. They can not only stimulate students' interest in learning, but also enable students to better understand and master the knowledge in the interaction through the main and auxiliary lectures. The course of "Cultivation and Practice of Graduate Comprehensive Quality" pays more attention to practicality and students' practical experience. This teaching method gives full play to the aggregation effect of the team and realizes the teaching effect of 1 + 1 > 2. At the same time, a collective lesson preparation mechanism for teachers is established, so that team members give full play to their own specialties, talents, complementary functions and complement each other.[3]

#### 2.4 Teach students according to their aptitude

Due to the uniqueness of engineering majors and the diversity of graduate students, they have a more perfect and rational understanding ability. Therefore, when conducting the ideological and political course, we should adopt appropriate teaching methods according to the different conditions of the students, and fully take into account their personal needs, so that they can better accept and practice the socialist core values. In order to make engineering graduate students better understand and master the science experiment, technology competition and technology innovation knowledge, we should strengthen team cooperation in the classroom, academic ethics, innovative thinking, but

also to the state to promote the development of science and technology, motivate students entrepreneurial employment policy into the classroom content, in order to achieve the ultimate goal of ideological and political education. In order to help engineering graduate students to overcome the difficulties of daily busy academic and scientific research, teachers should take various measures, such as academic exchanges, writing course summary, group cooperation, etc., in order to improve the students' expression, writing and interpersonal skills, make the concept of "course education" course more deeply rooted in the hearts of the people, the final realization of "course education" course construction goal.

### **3.** Conclusion

In the new era, the ideological construction of engineering graduate education courses must combine the humanistic spirit and the scientific spirit, and construct a systematic and coordinated characteristic content system. The "Graduate Comprehensive Quality Cultivation and Practice" course team will work to support this goal to promote its development. Create "3 (three course content plate) + 3 (teachers and students tripartite collaborative teaching) + 3 (three-step teaching link) course system", through the diversity of innovation teachers team cooperation, the students can gain rich knowledge in flipped classroom, and can understand through the vivid classroom teaching, so as to realize the value of engineering graduate students lead and personality shaping.

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