The Exploration of the Education Mode of Curriculum Ideological and Political Education under the Background of “Double-first-class”—The Design and Practice of Case Teaching Method

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Abstract: This paper mainly introduces how to strengthen the ideological and political education of graduate students through case teaching method under the background of “double first-class” university education, so as to improve their innovation ability and cognitive practice level. First of all, the paper analyzes the existing problems of ideological and political education model, including the lack of ideological and political elements in graduate innovative courses and the lack of teachers. Secondly, the paper puts forward a perfect case-based innovative postgraduate courses and curriculum ideological and political education model. It includes such approaches and methods as constructing a graduate innovation course system based on case teaching, forming a team of high-level teachers and experts for graduate students to innovate and start businesses, adding a graduate innovation practice platform with cases of ideological and political elements, integrating ideological and political content into innovative courses, and establishing a sound assessment and evaluation system. Finally, the paper concludes that the application of case teaching method can promote students’ interest in ideological and political courses, improve their ability to deal with practical problems, enhance their sense of nationality and patriotism, and cultivate students’ scientific spirit and innovative ability.

Keywords: Curriculum ideology and politics, Case-based teaching method, Innovative curriculum.

1. Introduction

1.1 Curriculum Ideological and Political Education is Conducive to Improving the Construction Level of “Double-first-class” Universities

At the National Conference on Ideological and Political Work in Colleges and Universities, the General Secretary Xi Jinping stressed that we must adhere to the moral education as the central link, the ideological and political work throughout the whole process of education and teaching, to achieve full education, all-round education; at the same time, he emphasized that “we should make good use of the main channel of classroom teaching”, “each course should keep a good channel and plant a good responsibility field, so that all kinds of courses and ideological and political theory courses can go hand in hand and form a synergistic effect”. Nowadays, ideological and political education is a major educational strategic choice in the new background and new situation. It is also a new direction for the development of the education industry in the future, improving the level of ideological and political work in colleges and universities will help to improve the comprehensive strength of new engineering talents. Therefore, in the process of building “Double-first-class”, colleges and universities should put the ideological and political education of postgraduates in a more prominent position, actively promote the innovative development and quality improvement of the ideological and political education of postgraduates, and make the ideological and political education of postgraduates a powerful driving force and important guarantee for promoting the construction of “Double-first-class” in colleges and universities[1].

1.2 Case Teaching has Become the Inevitable Trend of cultivating Innovative Talents

At present, most of the research on ideological and political education focuses on theoretical teaching. The main position is classroom teaching, and the research on “ideological and political education” for practical teaching is relatively rare. Therefore, in order to increase practical teaching, the most commonly used teaching method is case-based teaching. The use of case-based teaching methods can enable students to be in a specific real situation. Through the two-way or multi-way interaction between teachers and students, students’ enthusiasm can be mobilized, and their understanding of basic principles and concepts can be deepened. At the same time, it can also inspire students’ thinking, get the conclusion and answer diversity, and can also cultivate students’ advanced thinking and problem-solving abilities such as active exploration and innovation, and the ability to draw inferences and innovation. Therefore, schools should carry out the application reform of case-based teaching in ideological and political education around postgraduates, which is an inevitable trend of cultivating innovative talents for postgraduates[2].

1.3 Case Teaching Method is an Effective Way to Realize Ideological and Political Education

Integrating case-based teaching into ideological and political...
education can enable students to apply the knowledge they have learned to cases while learning knowledge points, and improve students’ ability to actually deal with problems. Case teaching can not only make the classroom no longer boring, but also improve students’ interest in learning. More importantly, it can cultivate students’ ability to care about current affairs and politics at home and abroad and pay attention to social hot spots in ideological and political aspects, and integrate the spirit of the report of the nineteenth National Congress of the Communist Party of China, the overall layout of the “five in one” and the “four comprehensive” strategic layout into the traditional curriculum. For a long time, engineering has not yet formed a seamless connection with teaching content in ideological and political education. Ideological and political education often exists in the form of isolated islands and is in a difficult state. The reason may be related to the lack of ideological and political concept cognition, imperfect talent training strategy, imperfect management mechanism and a series of problems such as insufficient exploration of teaching resources. Based on this background, in order to construct the ideological and political course under the background of new engineering, it is necessary to deepen the reform of ideological and political teaching, and adopt the case-based teaching method to integrate the teaching of professional knowledge and ideological and political education. Because ideological and political education contains rich world outlook and methodology, integrating ideological and political education into case design and practice in the field of engineering can further promote students to master scientific principles and methods, improve innovative thinking and ability, and enhance national sense and patriotism.

Based on the exploration of postgraduate ideological and political education mode under the background of “Double-first-class”, this paper carries out the design and practice of case-based teaching method in the field of engineering, aiming at forming the reform of education system and operation mechanism of unified coordination of internal and external resources, including postgraduate ideological and political education curriculum system, high-level ideological and political education teaching staff, postgraduate ideological and political education practice platform, teacher case-based teaching practice activities and relevant assessment system under complete postgraduate case-based teaching mode[3]. This paper tries to better solve the shortcomings and difficulties in the teaching of postgraduate ideological and political education, and then provides an important theoretical basis for the postgraduate training mode of research universities.

Through the case-based teaching method, students are guided to use the theoretical knowledge acquired in the textbook to analyze and understand social problems. In this way, the learning theoretical knowledge and solving practical problems are unified, and the organic combination of small classrooms and large society is realized. It is also conducive to stimulating students’ interest in learning ideological and political courses, so that students’ cognitive ability and practical level can be improved simultaneously. In addition, case teaching can combine ideological and political education with the contemporary world, the practicality of China's reform, opening up, and modernization, and the hot and difficult issues that students are generally concerned about. This is conducive to minimizing the distance between practice and theory and promoting the further play of the role of ideological and political education. It also plays a promoting role in cultivating students’ ability to use professional knowledge to understand social laws and developing students' scientific spirit and awareness of “course-thinking”.

2. Analysis of the Problems of the Existing Curriculum Ideological and Political Education Mode

2.1 The Lack of Ideological and Political Elements in Postgraduate Innovation Courses

At present, most of the school’s innovative courses only stay in the study of innovative knowledge, the cultivation of innovative thinking and the writing of academic papers. They do not pay enough attention to the students’ ideological field, and do not pay enough attention to the students’ ideological and moral level and political position. In the course, there is a lack of guidance for students in the ideological and political field. Graduate students participating in the course are rarely able to deeply understand the significance of the course and their own social responsibilities, which makes the original course not well complete the task of teaching graduate students innovative theoretical knowledge and shaping graduate students’ outlook on life.

2.2 There is a Lack of Teachers and a Relatively Single Teaching Mode for Postgraduate Innovative Curriculum Education and Curriculum Ideological and Political Teaching

Innovative courses and curriculum ideological and political teachers are an important guarantee for innovative courses and curriculum ideological and political education. However, at present, there is a lack of corresponding teachers in postgraduate innovative courses and curriculum ideological and political professors in our school. To a certain extent, they are in a vacuum or are held by some counselors, which leads to insufficient exposure of postgraduates to relevant knowledge. Secondly, at present, the innovative curriculum and curriculum ideological and political education model for graduate students are still in a relatively primitive single form, relying too much on the individual guidance of tutors, to a certain extent, can not be synchronized with the rapid development of contemporary economy and science and technology, and due to the lack of correct ideological guidance, students are difficult to play their own initiative, innovation enthusiasm is weak.

2.3 There is a Lack of Consideration of Curriculum Ideology and Politics in the Postgraduate Education Assessment System

At present, graduate students have a weak sense of innovation, and they mainly devote their energy to professional learning and assessment, and cannot well recognize their historical mission and social responsibility. The reason for this phenomenon is that graduate students mainly focus on their own professional content, and their initiative in learning
ideological and political content is low. Because they have not received good ideological and political education, graduate students generally do not know the purpose and significance of their own learning. In addition, in the process of evaluating graduate students’ learning achievements, only paying attention to the assessment of graduate students’ knowledge learning and ignoring the investigation of graduate students’ ideological field has aggravated the wrong consciousness of graduate students, so that the effect of curriculum ideological and political learning cannot achieve the expectation.

2.4 The Ideological and Political Teaching Method of the Course is Simple and Single

At present, the ideological and political education in colleges and universities lacks diversity and flexibility in teaching methods, showing a rigid and single state. The so-called single and inflexible teaching method means that the main method used in ideological and political teaching of curriculum at present is mandatory indoctrination teaching. Indoctrination means that teachers inject teaching contents into students from the outside through different means such as explanation, speech and narration, so that students can form correct ideological concepts, political views and moral norms. This method is not outdated and wrong. The problem is that indoctrination should not be the only teaching method, but also should study how to indoctrinate and how to indoctrinate, the current indoctrination method has become the only teaching method used by many ideological and political teachers in the course, inflexible in the way of indoctrination, not regard students as the subject of thinking, but as a constant container, into the mistake of spoon-feeding.

2.5 Existing Teaching Methods have Low Effectiveness

With the implementation of the new national curriculum, and under the encouragement and guidance of national policies, some ideology and politics teachers have made a lot of efforts in improving the teaching methods of ideological and political theory courses, and also paid attention to the diversity of methods. However, the results are not very significant, and the teaching effect is still unsatisfactory. That is, at present, the overall teaching method presents a poor state of being rigid and single, and forced indoctrination. However, even if some teachers have used diverse teaching methods, there are still instances of poor effectiveness in their use.

2.6 How to Incorporate Case-based Teaching into Ideological and Political Theory Courses

For a long time, the engineering discipline has not formed a seamless connection with the teaching content of ideological and political theory courses. Ideological and political education often exists in isolation and is in a difficult situation. The selection of cases is too single, and the references to theory are relatively low. In the teaching process of ideological and political theory courses, the teaching materials that teachers can refer to are limited, and there are not many ready-made cases that can be directly applied to teaching. In addition, the case-based teaching model has not changed the traditional rote learning teaching mode in the ideological and political theory courses. Students are still mainly taking notes in class, and the teacher is still in a one-way communication stage. These are the typical problems encountered in the traditional classroom teaching process when integrating case-based teaching into ideological and political theory courses. Of course, there are other issues such as inadequate teaching time due to the introduction of cases, and lack of enthusiasm from students for case discussions.

3. The Design and Practice of the case-based Teaching Method of Curriculum Thinking and Politics.

Based on the case teaching method, the school combines the case innovative course teaching, case curriculum ideological and political teaching, diversified teaching, course practice guidance, engineering practical project guidance and teaching evaluation (postgraduate innovation practice brand competition, experimental skills competition)[3], and makes use of multi-level resources on campus and off campus to realize the postgraduate as the center. To strengthen its innovation consciousness, ideological and political level, comprehensive skills, innovation ability and engineering practice ability. The overall execution method route is shown in Figure 1, that is, the multi-level linkage model of curriculum ideology and politics based on case teaching. The following are the problems faced by each module, and the implementation methods and ways are discussed in turn.

3.1 To Construct the Innovative Course System of Graduate Students based on Case Teaching

3.1.1 “Tailored” graduate case - based innovative courses and curriculum ideological and political syllabus

Based on the previous experience of opening innovative courses, the case teaching method and curriculum ideological and political content are integrated throughout the course teaching process. According to the characteristics of graduate students and the guiding spirit of curriculum ideological and political teaching, the postgraduate innovative teaching
syllabus is firstly defined. Including curriculum objectives, curriculum content, curriculum ideology and politics, reference materials, teaching basic requirements, class time allocation, teaching methods and means and assessment methods. The ideological and political content of the curriculum mainly focuses on innovative general courses and innovative targeted courses.

3.1.2 General innovation courses

The general courses can be adapted and adjusted by referring to the existing mature teaching content, and the case teaching method is widely used in the teaching process. In the teaching process, vivid cases are used to teach students the relevant knowledge of innovation theory and the ideological and political content of the course, so that students can not only learn the knowledge of innovation theory, but also learn. To clarify the significance of the knowledge to the country and society, improve students’ learning enthusiasm, and improve students’ ideological and political level. When teaching the content of the TRIZ theory, the case of how the Soviet innovation expert Altshuller invented the TRIZ theory and applied it to various research fields in the Soviet Union, significantly enhancing the country's technological capabilities could be used as an example. By using this case, students could learn about TRIZ theory and develop a deep understanding of the importance of their own knowledge for the country. They would then be able to take a more proactive role in the study of innovative theories and contribute to the construction of areas urgently needed by the country, thus taking on their historical mission with a sense of responsibility[5]. In terms of teaching methods, online MOOC resources and platforms such as tree of knowledge could be used to facilitate student learning outside the classroom, allowing them to learn about innovative theories and course-related ideological and political content at any time and place, achieving an organic combination of online and offline education.

3.1.3 Targeted innovation curriculum

For targeted innovation courses, we plan to use the form of special report invitation. The report is supplemented by the explanation of a large number of advanced figures in enterprises who are dedicated to their jobs and have made great contributions to the country and their advanced deeds. For example, the special report is made on the cases of technicians in Daqing Oilfield who, under the guidance of the “iron man spirit”, have broken through technical difficulties one after another and made outstanding contributions to the guarantee of China's oil security and the international status of oil production and refining technology. It is convenient for students to understand the relevant knowledge of innovation and better combine theory with practice. Through this type of teaching lecture, students are unconsciously influenced by patriotism education and gain a clear understanding of the qualities that talents in today's society need to possess. This style of lecture encourages students to fully exercise their subjective initiative, consciously enrich their own knowledge, sharpen their skills, improve their ideological and moral level, and grow into the talents that society needs[6]. The establishment of this lecture not only enhances students' knowledge and skills but also guides them to actively participate in building a better society and fulfills their social responsibilities.

3.2 For Graduate Students to Form a High-level Innovation and Entrepreneurship of Teachers and experts

In order to improve the innovation ability and ideological and political level of graduate students under the background of the rapid development of high-tech, the cultivation of teachers with specialized scientific research ability and ideological and political teaching ability has become the key basis to stimulate the innovation of graduate students. In particular, the training of young teachers with innovative spirit and good ideological and political level will play an important role in the process of case teaching.

3.2.1 Encourage the training of young people to use case teaching method to teach innovative curriculum and curriculum ideology and politics

The school establishes an incentive mechanism for innovative young teachers. Driven by the scientific research team, the school encourages young teachers to take advantage of their close connection with The Times and follow the trend of The Times. In terms of teaching methods, the new teaching method of case teaching is adopted. In terms of content, young teachers are encouraged to add ideological and political elements to the classroom. For example, it connects its research direction with the innovation course in the course and explains its important significance to the country and society. In addition to increasing the perceptual understanding of the relevant fields for the better learning of the theoretical knowledge of innovation, it also better understands the important significance of its own research direction and properly handles the relationship between its own goals and the needs of the motherland. Improve students' sense of responsibility and feelings of home and country, and ultimately make students grow into both scientific innovation spirit and technology application skills, willing to endure hardships and brave dedication of high-quality talents.

3.2.2 “Go out, bring in” innovative curriculum and curriculum ideological and political teacher training mode

In addition to cultivating full-time teachers in the school, external forces are needed at the same time. Innovative teachers are encouraged to “go out” and study in excellent enterprises that have made great contributions to the country and society, from which they can learn classic cases in production practice and valuable enterprise spirit, and take these as classic cases in the classroom. On the one hand, these cases can improve the perceptual knowledge of graduate students and deepen their understanding of innovation theory. On the other hand, these cases are also good carriers of curriculum ideology and politics, which can enable postgraduates to voluntarily return what they have learned to the society, so as to cultivate outstanding talents who are willing to contribute. While “going out”, we should also emphasize “bringing in”, inviting well-known innovators and experts in the field of thought and politics to hold a series of characteristic innovation lectures and ideological and political lectures. Experts use the case teaching method and rich
knowledge of innovation theory and ideological and political knowledge to sort out and supplement the innovative theoretical knowledge and ideological and political content in the classroom. Through the explanation of the deep and simple way, the postgraduates can better understand the theoretical knowledge of innovative courses and the profound connotation of the ideological and political content of the course, so that the ideological and political teaching of the course and the innovative theoretical teaching can be integrated to promote each other, so as to ensure that the innovative postgraduates can effectively improve their ideological and moral quality while learning innovative theoretical knowledge.

3.2.3 “Three against one” teaching model

In addition to carrying out the ideological and political teaching tasks in the course by using the case teaching method, the “three-to-one” teaching mode is used to guide the innovation of postgraduates and improve their ideological and political level in the innovation process. Under the guidance of innovative curriculum and curriculum ideological and political teachers, professional curriculum teachers and off-campus experts, ideological and political knowledge learning and innovative project practice will be carried out. In addition, teachers of innovative courses and curriculum ideological and political science should conduct periodic verification, supervise the advancement of students' innovative projects, and investigate the learning effect of their curriculum ideological and political content, so as to promote their practice in the field of innovation while greatly improving their ideological and moral quality.

3.3 To Add Ideological and Political Elements to the Innovation Practice Platform for Graduate Students with Case Studies

By fully utilizing the existing teaching and practice resources, as well as equipment and facilities, and through scientific integration and collaboration, the construction of an innovative practice platform with ideological and political elements is carried out in a planned and step-by-step manner. During the construction process, emphasis is placed on supplementing the relevant ideological and political content to solve the problem of the lack of ideological and political elements in previous innovation activities. Relying on the Launchpad Activity Center, innovation practice activities for graduate students are organized to cultivate high-quality talents who possess not only innovative theoretical knowledge and practical abilities but also high-level moral and ideological qualities. For example, to regularly organize learning activities about the achievements of outstanding individuals who have made significant contributions to the country and society in the field of innovation. Through the case studies of outstanding individuals, graduate students can deeply understand the concrete application methods of innovation theory in production practice, improve their production practice experience, and also convey the correct attitude towards life and the graduate students. It guides graduate students to consciously assume their social responsibilities, clarify the relationship between their own goals and social needs, and improve their ideological and political level, so as to provide society with available talents.

3.4 To Integrate Ideological and Political Content into Innovation Courses in the Form of Case Studies

By using rich and diverse case studies, complex and profound innovation theories can be clearly presented to help students better understand them. In the selection of case studies, practicality and ideological significance should be taken into consideration. Teaching cases with profound ideological significance should be selected to integrate ideological and political education with innovation theory education, so that students can improve their ideological and political level while learning innovation theory.

3.4.1 The teaching method based on case teaching is ideological and political mode

Case teaching method is adopted to deepen students' understanding of important ideas and principles, mobilize students' enthusiasm, improve students' ability to solve problems, and cultivate students' positive thinking, brave exploration and indomitable working spirit in the face of problems in the engineering field[7].

3.4.2 Innovation in the style of Daqing's iron will spirit is a highlight of ideology and politics education

Through the training of innovative methods and problems for technical innovators in Daqing oilfield, the problems solved will be used as cases for classroom teaching. By mastering innovative methods and analysis tools, we can cultivate students' innovative consciousness and creative spirit and improve their creative ability.

3.4.3 The mode of independent innovation based on serving national defense is characterized by ideological and political characteristics

Through the analysis of the typical case of the collapse of the Tacoma Narrows Bridge, the dynamic analysis knowledge of the professional finite element method is used to uncover the truth behind the case, and the rigorous scientific research attitude and key self-innovation ability are extended to cultivate the students' patriotic feelings and the sense of responsibility of dedication to national defense.

3.5 Establish a Comprehensive Assessment and Evaluation System for Innovative Courses for Graduate Students

3.5.1 Establish a standardized evaluation system

According to the three dimensions of knowledge, ability and quality of teaching objectives, the teaching process and students' listening results are evaluated. Based on the teaching objectives, the assessment method is established to provide a strong reference for teaching decision-making services.

Aiming at the two core links of teaching evaluation: teachers' teaching evaluation and students' learning effect, this paper adopts non-standard answer design evaluation method to carry out quantitative evaluation and qualitative evaluation.

3.5.2 Establish diversified assessment methods
Instead of the mode of "one volume determined by score", the principle of non-standard answer design is adopted, and the process assessment and outcome assessment are matched in a 1:1 ratio to form the final overall course assessment.

Process assessment: In order to mobilize students' innovation and cultivate their teamwork ability, students are divided into several groups, which take the group as the unit for class discussion and cooperation to complete homework, so that students can clarify the basic principles and general procedures of the course in practical operation, skillfully use the design principles, find and solve problems. Encouraging graduate students to proactively learn about the stories of innovative leaders in their field and articulate why they are studying. And how to use the innovation theory to solve the practical problems in the current production, clear their own social responsibility and historical mission.

Result evaluation: The final big homework adopts the form of case extension, encouraging students to combine the innovative theoretical knowledge they have learned with the cases in production practice, and encouraging students to choose the cases with ideological and political education significance, so that the postgraduates can deeply learn the relevant innovative knowledge while their ideological and moral quality can be significantly improved.

To sum up, the research contents and methods of innovative postgraduate courses and curriculum ideological and political education model based on case-based teaching are shown in Figure 2 below.

4. Summary

General Secretary Xi Jinping emphasized at the National Conference on Ideological and Political Work in Higher Education that ideological and political education should be integrated into the entire process of education and teaching, with all courses aligned with ideological and political theory courses to form a synergy. As a new teaching method, case teaching method has unique advantages as well as limitations. A comprehensive and scientific understanding of case teaching method is a prerequisite for its correct use. Based on the "Double First-Class" background, it is necessary to comprehensively and effectively strengthen the reform and innovation of graduate ideological and political education, and provide effective guarantee for the development of graduate education.

Acknowledgement

The thesis has received the support of Graduate High-level Core Curriculum project; Heilongjiang Provincial Education Reform Project (SJGY20210200); Key commissioned project for the research on undergraduate education and teaching reform in higher education in 2022SJGZ202200026.

References


Figure 2: Research implementation strategy and method roadmap


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