

Deep Thinking and Innovative Design of Professional Ideological and Political Education for Engineering Students in Local Universities in the New Era

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Abstract

Higher education must take the road of connotative development in the new era, especially for local universities. Strengthening the leadership of the Party is the fundamental guarantee for the connotative development of higher education. Classroom teaching is the key to improve the effectiveness of ideological and political education. At present, domestic colleges and universities have set off an upsurge in the construction of ideological and political courses and specialties. How to deeply understand the scientific connotation of professional ideological and political education, to establish and improve the curriculum system, and strive to create a synergistic mechanism is still a major issue to be considered urgently. Ideological and political education for engineering students has lots of shortcomings and difficulties in Colleges and universities. It is particularly urgent, important and crucial to carry out ideological and political education for engineering students. The ideological and political education for engineering students must be combined with the overall development strategy of the country and the training objectives of professionals. In the design of professional ideological and political teaching content and curriculum resources, we must learn from all the strengths and integrate them; In the teaching mode and evaluation mechanism of professional ideological and political education, we must keep pace with the times to improve the actual effect; in the professional ideological and political courses, it is necessary to link up and build up coordination mechanism.

Keywords

Ideological and political education, engineering Students, innovation design.

1. Introduction

Socialism with Chinese characteristics has entered a new era. People's yearning for a better life is stronger. People expect better education. Building a strong educational country is the basic project for the great rejuvenation of the Chinese nation and higher education has been given a higher position and mission. The connotative development of higher education is the inevitable way in the new era. Strengthening the Party's leadership is the fundamental guarantee for the connotative development of higher education. Classroom teaching is the key to improve the effectiveness of ideological and political education in Colleges and universities. For engineering students, how to break through the forbidden zone of ideological and political education in professional courses and get through the last mile of ideological and political education is an important issue that needs to solve urgently.

2. Deep Connotation of the New Era and New Requirements for Higher Education

The report of the Nineteenth National Congress points out that socialism with Chinese characteristics has entered a new era. The entry of socialism with Chinese characteristics into a new era means that the road, theory, system and culture of socialism with Chinese characteristics are developing continuously, people's yearning for a better life is stronger, people's needs are diversified, multi-level and multi-faceted, and they hope to have better education, more stable work and more satisfaction. Income, more reliable social security, higher level of medical and health services, more comfortable living conditions, more beautiful environment, richer spiritual and cultural life [1,2].

The Nineteenth National Congress of the Communist Party of China clearly pointed out that "building a strong educational country is the basic project for the great rejuvenation of the Chinese nation, and education must be given priority [1]. Higher education with Chinese characteristics must change the current situation of the unbalanced and insufficient development of higher education and achieve large-span and large-scale development. Li [3] pointed out that higher education with Chinese characteristics in the new era presents five new features: one is to take Xi Jinping's educational thought as the leading factor in the direction of development; the other is to make people satisfied with higher education as the objective of development; the third is to take the connotative development of higher education as the path in the way of development; and the fourth is to take overall planning of domestic and international dimensions as the platform; fifth, take overall planning of promoting "double first-class" construction as the starting point in development strategy.

The report of the Nineteenth National Congress of the CPC put forward that "accelerating the construction of first-class universities and first-class disciplines and realizing the connotative development of higher education"[1]. This is the most urgent and important task for higher education in China. We must closely focus on new features, new missions and new tasks, implement new development concepts, accelerate innovative development, and focus on strengthening the five key tasks: first, strengthen the leadership of the Party; second, uphold moral integrity and building people; third, build first-class disciplines; and fourth, educate high-end people. The fifth is to deepen the comprehensive reform of higher education [3]. Among them, strengthening the leadership of the Party is the fundamental guarantee for the connotative development of higher education.

3. The Importance and Urgency of Ideological and Political Education in Colleges and Universities in the New Era

The great achievements of higher education in China in a relatively short period of time have attracted worldwide attention, which are the results of the strong leadership of the CPC Central Committee and the common struggle of the whole Party and the people of all ethnic groups. The leadership of the Party is the greatest advantage of the socialist system with Chinese characteristics, the most essential feature of socialism with Chinese characteristics, the distinct institutional advantages and characteristics of higher education with Chinese characteristics, and the important magic weapon for the continuous progress of higher education in China. We must adhere to the socialist orientation of running schools with Chinese characteristics, which is the primary task of the development of higher education and the fundamental guarantee of the connotative development of higher education with Chinese characteristics.

At present, our country is in a deep-water period of reform and development, with profound adjustment of various interests. There are many kinds of murmurs and social trends of thought which are not conducive to the harmonious, stable and sustainable development of the Party

and the country. Some students show bad tendencies such as confusion of political beliefs, ambiguity of ideals and beliefs, distortion of value orientation and loss of social responsibility. Internationally, the influence of western ideological trends on the infiltration of young college students in China has never ceased. The change of value orientation and public opinion are complex and pluralistic. The overlap of many factors has brought tremendous impact on the world outlook, outlook on life and values of young college students in China. The cultivation of successors is facing the challenge of infiltration of hostile forces [4, 5]. Therefore, ideological and political education in Colleges and universities undertakes the important mission of training qualified builders and reliable successors of socialism with Chinese characteristics. Grasping ideological and political education in Colleges and universities concerns the overall situation of ideological work, successors of the cause of socialism with Chinese characteristics and the realization of the Chinese dream of the great rejuvenation of the Chinese nation.

The ideological and political education in Colleges and universities in the new era should be guided by Xi Jinping's socialist ideology with Chinese characteristics in the new era, with the strategic aim of "strengthening the Party's leadership over ideological work", with the basic task of building up morality and cultivating people with ideals, abilities and responsibilities as the basic guarantee, and with the basic guarantee of strengthening the Party's leadership. To improve the ideological and political quality is the essential requirement, the ideological and political theory course in Colleges and universities is the main channel, and the construction of the teaching staff in Colleges and universities is the key [6].

4. The Present Situation of Ideological and Political Education for Engineering students in the New Era

The results of the rolling survey on the ideological and political status of college teachers and students in 2018 showed that the first factor that had the greatest impact on the ideological, behavioral and growth of college students was the professional teachers. On June 21, 2018, the National Conference on Undergraduate Education in Universities and Colleges was held. Minister Chen Baosheng emphasized that it was very important to strengthen ideological and political education in courses and majors. On the basis of continuing to improve the quality of ideological and political courses, he urged other courses to "keep a good canal and cultivate a good field of responsibility" and promote the combination of professional knowledge education and ideological and political education.

Since the National Conference on Ideological and Political Work in Colleges and Universities was held, Shanghai has accelerated the reform of education and teaching from "ideological and political courses" to "curriculum ideological and political education", enabling all classes to have "ideological and political flavor", and all teachers to take up "ideological and political responsibilities", exploring the construction of a large ideological and political education system for all staff and courses, and achieved remarkable results. To push forward the reform of "ideological and political education in curriculum" is not simply to add a few courses or activities, but to cultivate and shape values, integrate ideological and political education into all curricula.

Integrating ideological and political elements into the teaching content of professional courses, promoting socialist core values in a quiet way and giving full play to the educational function of professional courses will not only help to build up students' cultural self-confidence, but also enhance professional teachers' sense of responsibility and moral ability in ideological aspects. Although some universities in Shanghai had made some meaningful explorations in the reform of curriculum ideological and political education and formed representative courses. But the construction of curriculum system was not perfect, the normative construction and institutional support of ideological and political reform of professional courses were relatively

weak, and students' ideological and political education of curriculum was weak, identity and sense of achievement were not high [7-8].

At present, domestic colleges and universities have set off an upsurge in the construction of ideological and political courses, professional ideological and political courses, the emergence of typical colleges and universities, the output of typical courses. However, how to deeply understand the scientific connotation of professional ideological and political work, profoundly reveal the logical structure of professional ideological and political work, establish and improve the curriculum system of professional ideological and political work, and strive to create a cooperative mechanism of professional ideological and political work, is still a major issue to be considered and urgently solved.

Local colleges and universities account for more than 95% of the national higher education schools, but there are particularities in the tradition of running schools, capital investment, subject layout, teachers' team, students' characteristics and material and technological basis of local colleges and universities. How to carry out professional and ideological education in combination with the orientation and characteristics of running schools in Local Colleges and universities deserves further study. It is particularly urgent, important and crucial to carry out ideological and political education in science and engineering specialties.

5. Innovative Design of Ideological and Political Education in Local Universities in the New Era

5.1. Design of Ideological and Political Teaching Contents and Course Resources

By consulting literature widely, conducting in-depth investigations, gaining the strengths of all families, designing teaching content and curriculum resources, modularization of teaching content and rich media of teaching resources could be realized. The flow chart of the innovative design of professional ideological and political education for engineering students was shown in Figure 1.

(1) On the content of teaching, we should construct and practice professional ideological and political courses integrating professional knowledge, professional ethics, scientific thinking, professional accomplishment, humanistic accomplishment and political accomplishment.

(2) In terms of curriculum resources, we should grasp the pulse of the times and keep abreast of the main theme of the times, create a resource-rich, dynamic and updated professional ideological and political curriculum resource bank, and form teaching resources such as video, audio, animation, PPT, e-book, news, electronic literature and evaluation question bank.

5.2. Optimization of the Professional Ideological and Political Education Teaching Model and Evaluation Mechanism

(1) In the teaching mode, we should make full use of the information technology to carry out the reform and innovation of teaching mode, and use the network teaching platform such as Panya/Classroom School and mobile phone clients such as Learning Tong to carry out the reform of teaching mode such as flipping classroom and mixed teaching so as to improve the classroom teaching effect.

(2) In the evaluation mechanism, ideological and moral character should be included as the important indicators of students' assessment. We should explore the quantitative indicators system of ideological and moral character, establish the whole process assessment mechanism of ideological and political education, strengthen process management, professional knowledge learning and build up people's morality and effectiveness.

5.3. Construction of the Course System of Professional Ideological and Political Education

We should establish professional ideological and political course group, ideological and political course group, humanistic quality course group, theoretical course group and social practice course group, construct professional ideological and political course system and carry out teaching practice to ensure the whole process of ideological and political education, all-round education.

5.4. Exploration of the coordination mechanism of professional ideological and Political Education

We should revise the personnel training plan, explore the professional ideological and political education mechanism of management department, curriculum system, subject specialty, ideological and political/professional teacher cooperation, and carry out teaching practice; Explore teaching, scientific research, management, service, psychological, cultural, practical, network education, personnel, organizational education, self-education and other education channels in teaching practice; Summarize and optimize a long-term mechanism of professional ideological and political education in practice and continue to improve it.

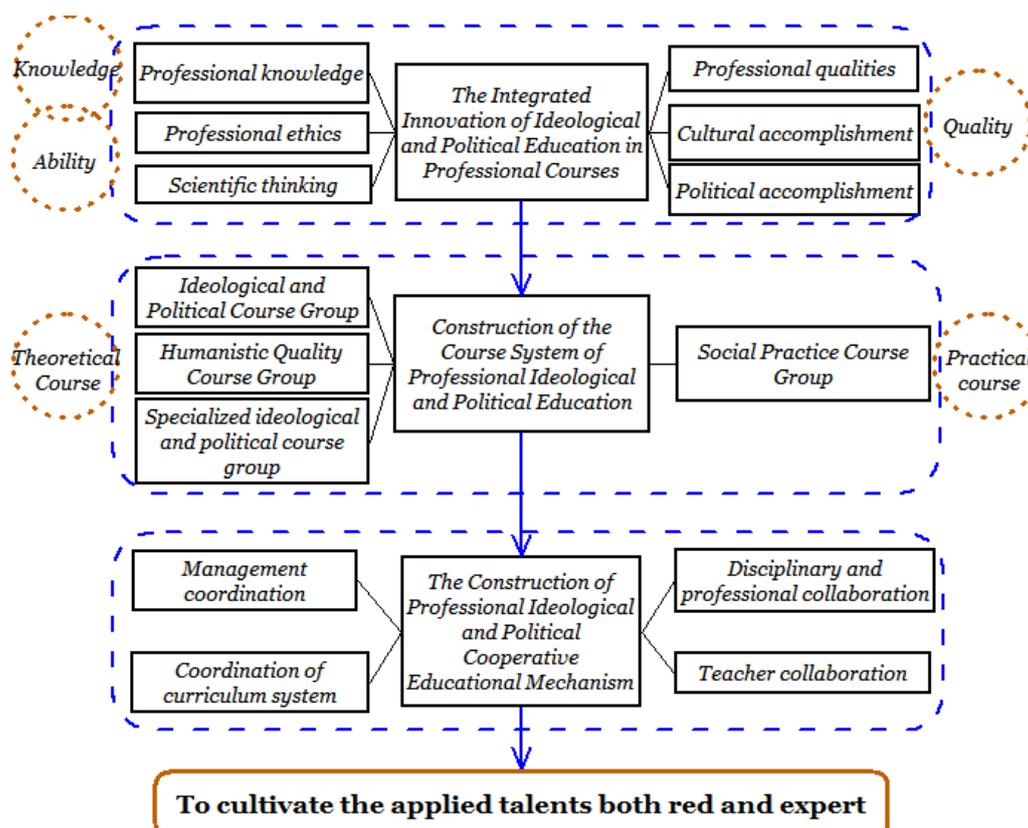


Fig 1. The flow chart of the innovative design of professional ideological and political education for engineering students.

6. Conclusion

It is particularly urgent, important and crucial to carry out ideological and political education in science and engineering. The ideological and political education for engineering students must be combined with the overall development strategy of the country and the training objectives of professionals. In the design of professional ideological and political teaching content and curriculum resources, we must learn from all the strengths and integrate them; In

the teaching mode and evaluation mechanism of professional ideological and political education, we must keep pace with the times to improve the actual effect; in the professional ideological and political courses, it is necessary to link up and build up coordination mechanism.

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References

- [1] J.P. Xi. To Win the Great Victory of Socialism with Chinese Characteristics in the New Era by Building a Well-off Society in an All-round Way--Report at the Nineteenth National Congress of the Communist Party of China, Theory Research, vol. 11 (2017), 1-12.
- [2] Z.H. Li. The profound connotation and significance of the new era, Contemporary Chinese History Studies, vol. 25 (2018), 6-10.
- [3] Y.Y. Li. New Characteristics and New Thoughts of Higher Education with Chinese Characteristics in the New Era, Higher Education in China, vol. 23 (2017), 4-6.
- [4] S.M. Wang, Y.H. Tang. Innovation and Development of Ideological and Political Theory Course in Colleges and Universities in the New Era, Research on Ideological Education, No. 05 (2018), 86-89.
- [5] F.Li. Research Method Innovation of College Students' Ideological and Political Education Based on Cognitive Neuroscience, NeuroQuantology, vol. 16(2018), 296-302.
- [6] H.L. Gu. Theoretical Guidance and Development Idea of Ideological and Political Education in Colleges and Universities in the New Era - Learning Xi Jinping's Socialist Thought with Chinese Characteristics in the New Era, Guide to Ideological and Theoretical Education, No. 01 (2018), 4-10.
- [7] J.H. Kuang, Y. Zhang, Y. Gu. Exploration and practice of Ideological and political education in science and engineering courses, Management Observation, No. 1 (2018), 119-122.
- [8] J.T. Yu, W.Q. Wang, Y.Q. Xu. Professional teachers practice the logic and essentials of "curriculum ideological and political education" - Taking Science and engineering courses as an example, School Party building and ideological education, No. 1 (2018), 64-66.