

# Exploration and Analysis of the Innovation and Practice of the Double-Helix Model for Ideological and Political Education Reform in Colleges and Universities

**Enhong Wu\***

School of Marxism, Qilu University of Technology, Jinan 250353, Shandong, China

\*Author to whom correspondence should be addressed.

**Copyright:** © 2025 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

**Abstract:** In the new era, ideological and political education in colleges and universities shoulders the fundamental task of cultivating talents with moral integrity. Faced with the new situation of students' diverse ideologies, expanded teaching scenarios, and upgraded educational needs, traditional models of ideological and political education reform have gradually revealed issues such as insufficient coordination and a disconnect between knowledge and practice. Based on this, this paper systematically elaborates on the paths for model innovation from four dimensions: reconstruction of teaching content, innovation in teaching methods, establishment of collaborative mechanisms, and optimization of evaluation systems. It also analyzes the implementation process and key measures through practical cases in colleges and universities. Through this analysis, the aim is to enhance the quality of ideological and political education in colleges and universities and cultivate a new generation of individuals who can shoulder the responsibility of national rejuvenation.

**Keywords:** Ideological and political education in colleges and universities; Double helix; Theoretical teaching; Practical education; Collaborative innovation

---

**Online publication:** December 31, 2025

## 1. Introduction

Ideological and political education serves as the core vehicle for colleges and universities to fulfill their fundamental mission of fostering virtue and nurturing talent, with its reform and innovation directly influencing the political orientation and comprehensive qualities of talent cultivation <sup>[1]</sup>. As social ideologies in the new era become increasingly diverse and dynamic, along with the rapid advancement of information technology and the urgent need for the connotative development of higher education, ideological and political education in colleges and universities is confronted with new opportunities and challenges. Against this backdrop, the

Ministry of Education has put forward requirements for the construction of a “grand ideological and political education course,” emphasizing the need to integrate the small classroom of ideological and political education with the broader societal classroom, achieving a profound fusion of theoretical learning and practical experience [2]. The double-helix model, inspired by the double-helix structure of DNA in biology, is characterized by the intertwining, collaborative effort, and dynamic evolution of two core elements. In the context of ideological and political education reform in colleges and universities, this model can be visualized as the double helix of “theoretical instruction” and “practical education.” These two components not only function independently but also permeate and mutually reinforce each other, jointly driving the continuous improvement of the quality of ideological and political education. Therefore, constructing and implementing a double-helix model for ideological and political education reform holds significant importance in addressing the challenges faced by traditional ideological and political education.

## **2. Innovative pathways for the double-helix model in ideological and political education reform in colleges and universities**

### **2.1. Reconstructing the content system of instruction and strengthening the synergy of double-helix content**

Universities should be grounded in the double-helix synergistic logic to reconstruct the ideological and political education content system, achieving seamless integration between theoretical teaching and practical education. In terms of theoretical teaching, the teaching team needs to break free from the constraints of textbook chapters and construct a three-dimensional content system that combines “core theories, contemporary themes, and professional characteristics.” This system should deeply integrate the basic principles of Marxism, the Thought on Socialism with Xi Jinping Chinese Characteristics for a New Era, social hot topics, industry trends, and students’ majors [3]. In practical education, corresponding practical themes and tasks should be designed around the core theoretical content, making practice an extension and verification of theoretical learning. For instance, social surveys and rural revitalization practices can be organized in conjunction with the “practical character of Marxism,” while projects such as voluntary services and red cultural study tours can be carried out around the “core socialist values,” balancing ideological and practical aspects [4]. Additionally, a dynamic adjustment mechanism for teaching content should be established to regularly optimize theoretical modules and practical project libraries based on theoretical updates, social demands, and student feedback, ensuring the synergy and timeliness of the double-helix content.

### **2.2. Innovating teaching methods and means to activate the vitality of the double-helix operation**

Innovation in teaching methods is the key to the efficient operation of the double-helix model. Colleges and universities need to break away from the single-mode of ideological and political education where “teachers mainly lecture and students passively listen,” and construct a teaching method system that combines “contextualized theoretical instruction with immersive practical education.” In theoretical instruction, teachers can enhance interactivity and appeal by comprehensively employing methods such as case-based teaching, scenario simulation, group discussions, and blended online-offline teaching [5]. For example, teachers can guide students to think actively through the sequence of “case introduction–theoretical explanation–group debate–summary and evaluation.” They can also extend the teaching time and space by using platforms like MOOC and Learning Pass to disseminate supplementary materials and conduct online Q&A sessions.

Additionally, leveraging VR/AR technology to recreate historical scenes of revolutionary significance allows students to immersively experience the practical power of theories. Regarding practical education, colleges and universities should establish a four-in-one platform encompassing “on-campus practice, social practice, volunteer service, and innovation and entrepreneurship” to achieve comprehensive coverage and precision. On campus, theme speeches, revolutionary dramas, and other activities can be organized through ideological and political laboratories and campus cultural events. Off campus, collaborations with local governments and enterprises can facilitate activities such as “Three Rural Services” and internships. Volunteer services should focus on community governance and public welfare undertakings, including educational support, environmental protection campaigns, and other activities. Innovation and entrepreneurship should integrate ideological and political education with professional innovation, guiding students to fulfill their missions through technological breakthroughs and rural revitalization efforts. Meanwhile, information technology should be utilized to empower practical education by publishing tasks, recording processes, and sharing outcomes through online platforms, thereby achieving an online-offline linkage between theory and practice.

### **2.3. Establishing a collaborative education mechanism to harness the double-helix synergistic power**

The efficient operation of the double-helix education model relies on the support of a robust collaborative mechanism. Higher education institutions must break down departmental barriers, integrate educational resources, and establish an education system characterized by “multi-party participation, clearly defined roles and responsibilities, and efficient collaboration,” thereby harnessing the combined forces of collaboration among the university, local entities, teachers, and students. In terms of internal collaboration, a leading group for ideological and political education reform under the unified leadership of the university’s Party committee should be established, integrating core departments such as the Academic Affairs Office, School of Marxism, Student Affairs Office, Youth League Committee, and various secondary colleges, with clearly defined roles and responsibilities: the School of Marxism takes the lead in designing and implementing theoretical teaching content; the Student Affairs Office and Youth League Committee coordinate practical educational activities; the Academic Affairs Office is responsible for formulating teaching plans and monitoring quality; and secondary colleges implement theoretical and practical teaching tasks based on their professional characteristics. The leading group coordinates to resolve operational challenges through regular joint meetings, forming an internal education framework characterized by “unified leadership, division of responsibilities, and collaborative advancement.” In terms of university-local collaboration, higher education institutions should actively engage with local governments, enterprises, and public institutions, revolutionary education bases, communities, and other external resources to establish stable cooperative bases for practical education, achieving resource sharing and mutual benefit. External partners provide practical venues, mentors, and projects, participating in program design and effectiveness evaluation; in turn, universities offer talent support, theoretical consultation, and cultural services. For example, collaborate with red education bases to develop study courses, where the base commentators and ideological and political teachers from universities jointly deliver lectures; establish “ideological and political education + industry” practical projects with enterprises, enabling students to comprehend the craftsmanship spirit and social responsibility through practice <sup>[6]</sup>. In terms of teacher-student collaboration, it is essential to reinforce the guiding role of teachers and the principal status of students. Teachers should participate fully in practical activities, providing professional support and ideological guidance; students should be encouraged to participate in teaching reforms through methods such as questionnaires, symposiums,

and course evaluations. Meanwhile, a collaborative mechanism between ideological and political course teachers and counselors should be established, with the former focusing on theoretical teaching and practical guidance, and the latter concentrating on tracking ideological trends and daily management, thereby forming a collaborative education chain of “theoretical guidance + practical guidance + daily education” [7].

## **2.4. Optimizing the evaluation and assessment system to ensure the effectiveness of the double-helix approach to education**

A scientific evaluation and assessment system is the key guarantee for the effective implementation of the double-helix model. Higher education institutions need to break away from the traditional orientation of ideological and political education that “emphasizes outcomes over process and theory over practice,” and establish a comprehensive evaluation system that integrates “theoretical literacy, practical ability, and ideological character.” The evaluation subjects should be diversified, involving ideological and political course teachers, counselors, practical mentors, classmates, and partner organizations to ensure objective and comprehensive evaluation results. In terms of evaluation content, the assessment of theoretical literacy should take into account the mastery of core knowledge, theoretical application, and critical thinking skills, evaluated through multiple dimensions such as classroom performance, assignment quality, online learning, and final exams [8].

The assessment of practical ability should focus on participation, task completion quality, and problem-solving skills, based on practical reports, results presentations in this context, but for precision and natural flow, we might use “demonstrations of practical outcomes” and organizational evaluations. The assessment of ideological character should revolve around ideals and beliefs, moral cultivation, and social responsibility, conducted through daily performance and the duration of volunteer service. The evaluation methods should combine formative and summative assessments, as well as quantitative and qualitative evaluations. Formative evaluation records students’ growth trajectories, while summative evaluation comprehensively measures overall literacy. Quantitative evaluation assigns scores based on data such as exam results and practical duration [9], while qualitative evaluation provides a comprehensive description of ideological performance and practical gains through comments and evaluations. Additionally, a feedback and application mechanism for evaluation results should be established, linking the results to awards, honors, and recommendations for party membership, while adjusting teaching based on feedback to form a closed loop of “evaluation–feedback–optimization,” thereby enhancing the effectiveness of education.

## **3. Practical exploration and effectiveness of the double-helix model for ideological and political education reform in universities**

### **3.1. Overview of practical cases**

To address the issues of “disconnection between knowledge and action” and “insufficient collaboration” in ideological and political education, a comprehensive university launched a practical implementation of the double-helix model for ideological and political education reform in 2020. Led by the School of Marxism, it collaborated with the Academic Affairs Office, the Student Affairs Office, the Youth League Committee, and various secondary schools to establish a double-helix collaborative education system that integrates “theoretical teaching and practical education.” The initiative covered 20 schools and 120 undergraduate majors across the university, involving a cumulative total of over 15,000 student participants. It established 32 off-campus practice bases, developed a repository of over 100 theoretical teaching cases and over 80 practical project repositories,

forming a relatively mature operational mechanism for the model.

### **3.2. Specific practical measures**

#### **3.2.1. Reconstructing teaching content**

The School of Marxism at the university organized a faculty team to restructure the content of ideological and political courses, dividing “Xi Jinping’s Thought on Socialism with Chinese Characteristics for a New Era” into three modules: “Theoretical Connotations,” “Practical Achievements,” and “Youth Responsibility.” Each module corresponds to the design of 3 to 5 practical projects. For instance, the “Practical Achievements” module aligns with projects such as “Rural Revitalization Research” and “Visits to Technological Innovation Enterprises.” Each secondary college has developed distinctive “Ideological and Political + Professional” teaching content tailored to its professional characteristics. For example, the School of Mechanical Engineering has integrated the “Spirit of Master Craftsmanship of a Great Power” into its professional courses and designed the “Smart Manufacturing Practice” project.

#### **3.2.2. Innovative teaching methods**

The school implements a model of “contextualized theoretical teaching + immersive practical education”: instructors of ideological and political courses adopt case-based teaching and a hybrid approach combining online and offline instruction, utilizing VR technology to recreate historical revolutionary scenes <sup>[10]</sup>. Additionally, the school has established a “on-campus + off-campus” practical platform, organizing activities such as “Red Culture Festival” and “Ideological and Political Debate Competition” on campus, while organizing research trips to revolutionary areas for students, participating in teaching assistance in rural areas, and engaging in internships and training in enterprises off campus. Furthermore, the school has developed an online platform for ideological and political education reform, enabling the sharing of theoretical learning resources, the distribution of practical tasks, and the recording and showcasing of progress and achievements.

#### **3.2.3. Establishing a collaborative mechanism**

The school has established a leading group for ideological and political education reform and regularly convenes joint meetings. It has signed cooperation agreements with local governments, red education bases, enterprises, etc., establishing 32 off-campus practical bases and hiring 28 off-campus practical mentors. Additionally, a mentorship mechanism has been established between instructors of ideological and political courses and counselors, with each instructor of ideological and political courses being assigned to 2–3 classes to participate in student practical guidance and ideological education.

#### **3.2.4. Optimizing the evaluation system**

The school has established a comprehensive evaluation system consisting of “theoretical literacy (40%) + practical ability (30%) + ideological character (30%).” Theoretical literacy encompasses classroom performance (15%), online learning (10%), and final exams (15%). Practical ability includes practical participation (10%), practical achievements (10%), and practical appraisal (10%). Ideological character comprises daily performance (10%), volunteer service (10%), and peer evaluation among students (10%). The evaluation results are directly linked to student awards, honors, and recommendations for Party membership.

### **3.3. Practical achievements**

Through three years of practical exploration, the double-helix model of ideological and political education

reform at this school has achieved remarkable results. At the student level, student satisfaction with ideological and political education has increased from 68% before implementation to 89%. Students' mastery of theoretical knowledge, ideological awareness, and social responsibility have significantly improved, with outstanding performances in activities such as volunteer service, social research, and innovation and entrepreneurship. Over 200 students have been recognized as outstanding volunteers or advanced individuals in social practice at the provincial level or above. At the teaching level, the classroom interaction rate in ideological and political courses has risen from 35% to 75%, and teachers' teaching abilities have significantly enhanced. The school has been approved for 15 ideological and political education reform projects at the provincial level or above, published over 30 related academic papers, and developed characteristic practical projects that have been adopted by multiple universities. At the educational level, the school has cultivated a distinctive educational characteristic of "solid theoretical foundation, strong practical ability, and noble ideological character." The quality of student employment and employer satisfaction continue to improve, and the school's ideological and political education work has received multiple provincial-level commendations.

## 4. Conclusion

The double-helix model of ideological and political education reform in colleges and universities centers on "theoretical instruction" and "practical education." By integrating content, innovating methods, ensuring mechanisms, and optimizing evaluations, it establishes a new paradigm of ideological and political education that combines "knowledge with action and enables collaborative empowerment," effectively addressing many dilemmas of traditional ideological and political education. In the context of the new era, ideological and political education in colleges and universities faces more complex situations and higher requirements, necessitating continuous innovation and refinement of the double-helix model. It is believed that through ongoing innovation and practice, the double-helix model will continuously unleash new vitality and make even greater contributions to cultivating a new generation of individuals who are capable of taking on the great task of national rejuvenation.

## Disclosure statement

The author declares no conflict of interest.

## References

- [1] Jiang Y, Chang H, 2025, Analysis of the Current Situation and Optimization Strategies for Ideological and Political Education among College Students in the New Era. *Journal of Shenyang Agricultural University (Social Science Edition)*, 1–9.
- [2] Da Z, Zha S, Renzeng Q, 2025, Exploration of Innovation and Practice in the "Great Ideological and Political Course" at Ethnic Universities. *University*, (21): 55–58.
- [3] Zhang C, Qin Y, Gao H, 2025, The Rationale for Strengthening Ideological Education on the Community with a Shared Future for Mankind in Colleges and Universities under the "Great Ideological and Political Course" Education System. *Heilongjiang Education (Higher Education Research and Evaluation)*, (11): 59–61.
- [4] Zhou S, Du Y, Zhou J, 2024, The Value and Practical Path of Integrating Red Culture into Mental Health Education in Colleges and Universities. *Journal of Suzhou Education Institute*, 27(05): 40–46.

- [5] Yin Y, 2025, Reflections on Empowering Ideological and Political Education in Vocational Courses through Blended Teaching under the Concept of “Three-Comprehensive Education”—Taking the Commercial Display Design Course as an Example. *Art Education Research*, (20): 87–91 + 128.
- [6] Yan S, 2025, Research on the Path of Ideological and Political Education for Graduate Students in the New Era from the Perspective of Cultivating Entrepreneurship. *Beijing Education (Higher Education)*, (11): 70–72.
- [7] Zhu D, 2025, Construction and Practical Innovation of a Ternary Synergistic Mechanism for Red Cultural Education in the “Great Ideological and Political Course” from the Perspective of Empowerment Theory. *Journal of Jiangxi Open University*, 27(03): 17–22.
- [8] Ma X, Lv Y, Ren Q, et al., 2025, Exploration of Ideological and Political Education in the Data Structures and Algorithms Course under the Blended Online-Offline Teaching Mode. *Western China Quality Education*, 11(18): 67–71.
- [9] Gou M, 2023, Exploration of the Reform of Ideological and Political Education Evaluation in Colleges and Universities in the New Era—Based on Big Data-Driven Approaches. *Journal of Huizhou University*, 43(01): 32–37 + 86.
- [10] Zhang Y, Zheng J, 2022, Technological Reflections on Smart Classroom Teaching of Ideological and Political Education in Universities in the Era of Big Data. *Journal of Hubei Normal University (Philosophy and Social Sciences Edition)*, 42(03): 130–135.

**Publisher's note**

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.