Original Paper

Research on the Integration Education of AI Empowerment and

Course-based Ideological and Political Education

Xuanxiao Lu¹

¹ Department of Foreign Languages Teaching, Hainan Vocational University of Science and Technology, Haikou, China

Received: August 22, 2025 Accepted: November 04, 2025 Online Published: November 26, 2025

doi:10.22158/wjer.v12n6p78 URL: http://dx.doi.org/10.22158/wjer.v12n6p78

Abstract

In the current higher education system, the organic integration of courses and ideological and political education still faces several key bottlenecks that need to be urgently broken through. From the perspective of teaching practice, the primary problem lies in the fact that traditional teaching overly focuses on imparting professional knowledge and skills training, without systematically internalizing ideological and political elements such as socialist core values and patriotism as the core of teaching, resulting in a structural imbalance between knowledge transmission and value guidance. On the other hand, the existing ideological and political education models generally suffer from rigid forms, and one-way theoretical preaching fails to mobilize college students' cognitive participation. This lack of contextualized and immersive experiences severely restricts the effectiveness of ideological and political education. In response to these predicaments, it is suggested to implement a dual-track reform path: the teaching material system needs to be restructured, embedding ideological and political education touchpoints in teaching modules; intelligent educational technology means should be actively utilized to develop digital teaching tools such as VR scenario simulation and AI interactive O&A, transforming abstract ideological and political theories into perceivable and interactive learning experiences, thereby comprehensively enhancing the affinity and pertinence of ideological and political education.

Keywords

Artificial Intelligence (AI), Course-based Ideological and Political Education, Integrated Teaching, Teaching Path

1. Introduction

In the current era of global digital transformation, artificial intelligence (AI) technology has deeply permeated all areas of social development, especially in higher education, where it has demonstrated unprecedented application value. As a crucial link in cultivating socialist builders and successors, ideological and political education in colleges and universities urgently needs to incorporate AI technology as an innovative engine to keep pace with the times.

In the current higher education system, the large-scale classroom teaching model makes it difficult for teachers to fully pay attention to the individual differences and ideological trends of each student. Against the backdrop of comprehensively promoting ideological and political education in courses, how to effectively integrate ideological and political education elements into professional courses and build a comprehensive education system that covers all students, all processes, and all aspects remains a challenge that educators need to deeply explore. Notably, AI technologies such as big data analysis, intelligent recommendation algorithms, and adaptive learning systems offer innovative paths for achieving precise ideological and political education. AI-based learning analysis systems can capture students' cognitive characteristics and value orientations in real time, providing data support for the formulation of differentiated ideological and political education plans through the construction of learner profiles; intelligent tutoring systems can dynamically adjust the presentation of ideological and political teaching content based on student feedback; and emotion computing technology helps assess the effectiveness of ideological and political education. This study focuses on the innovation of ideological and political education in courses empowered by AI, exploring the construction of a new teaching model of "AI + ideological and political education in courses". It aims to transform ideological and political education from a "broad irrigation" approach to a "precision drip irrigation" through technological means, enhancing the effectiveness, pertinence, and appeal of ideological and political education while improving the teaching effectiveness of professional courses, and providing intelligent solutions for cultivating new era talents capable of shouldering the great rejuvenation of the nation.

2. The Concepts

2.1 The Artificial Intelligence

Artificial Intelligence (AI), as the core field of contemporary cutting-edge technology, is an interdisciplinary subject dedicated to simulating human intelligent activities through computer systems. It integrates knowledge from various fields such as computer science, cognitive psychology, mathematical logic, engineering, and philosophy, aiming to develop machine systems with human-like intelligent characteristics. These systems not only perform traditional computing tasks but also achieve advanced cognitive functions such as natural language processing, knowledge acquisition, logical reasoning, and autonomous decision-making. From the technical implementation perspective, AI systems gradually break through the limitations of traditional programs through algorithm design, big

data training, and computing power support, demonstrating the potential to approach or even surpass human-specific cognitive abilities. Its application scope has expanded from the initial theoretical research in laboratories to numerous practical fields such as medical diagnosis, financial analysis, and intelligent manufacturing, becoming a key driving force for the digital transformation of modern society.

With strategic planning and policy support, China's artificial intelligence industry has entered a stage of rapid development. The "New Generation Artificial Intelligence Development Plan" issued at the national level has pointed out the direction for the industry. Through a multi-dimensional support system including fiscal investment, policy preferences, and infrastructure construction, a strategic framework for the development of AI technology has been established. From the perspective of resource endowment, not only does China have the largest scale of engineers and scientific research talent reserves in the world, but it also benefits from the massive data resources generated by its 1.4 billion population, providing unique development conditions for the training of machine learning algorithms. As the undisputed leader in global artificial intelligence development, the United States has established a comprehensive competitive advantage in this field. Its research system consistently maintains the technological leadership in cutting-edge areas such as deep neural network architectures, semantic understanding algorithms, agent control systems, and autonomous driving technologies.

Artificial intelligence is reshaping the development trajectory of human civilization in an unprecedented manner. This disruptive technological field has become a strategic highland in global technological competition. From industrial upgrading to social governance, from medical revolution to educational transformation, artificial intelligence technology is reconfiguring the underlying logic of various fields. Major global economies have incorporated artificial intelligence into their national strategies, investing huge amounts of research and development funds, and laying out the next-generation intelligent infrastructure. In this wave of technological revolution, China has demonstrated strong innovative momentum, making significant progress in multiple dimensions such as algorithm breakthroughs, computing power enhancement, and data application. The development of artificial intelligence is no longer limited to simple technological iterations; it is forming a brand-new technological paradigm, and this paradigm shift will deeply affect the organizational form and operational mechanism of human society. With the continuous breakthroughs in basic theories and the continuous deepening of industrial practices, it is foreseeable that artificial intelligence will become a key driving force for the leapfrog development of human civilization, and its influence will far exceed the changes brought about by the industrial revolution.

2.2 The Course-based Ideological and Political Education

Course-based ideological education is an innovative practice in contemporary Chinese higher education. Its essence is to establish a completely new educational model that "delivers influence imperceptibly". This concept originated from the practical exploration of the Shanghai education comprehensive reform in 2014. Its core essence lies in breaking through the traditional explicit indoctrination model of

ideological education and integrating socialist core values, basic principles of Marxism, and other ideological and political education elements into the professional curriculum system through systematic teaching design. The Ministry of Education clearly emphasized in the "Guidelines for the Construction of Ideological Education in Higher Education Courses" that this reform aims to achieve value formation in the process of knowledge transmission and ability cultivation. The key lies in establishing a "knowledge - ability - value" tripartite teaching system. From the implementation perspective, course-based ideological education emphasizes the dialectical handling of three core relationships: First, the integration of professional knowledge and value guidance, requiring avoiding simple "labeling" teaching; second, the complementarity of explicit education and implicit education, emphasizing the infiltration of ideological enlightenment in professional contexts; third, the unification of talent cultivation and the cultivation of moral character, striving to solve the educational dilemma of "emphasizing skills but neglecting morality". Its ultimate goal is to build an all-staff, all-process, and all-round education system, cultivating morally and academically accomplished socialist builders and successors. The deep value of this concept lies in reshaping the educational paradigm of higher education in the new era.

2.3 The Integrated Teaching

The integrated teaching, as an innovative educational paradigm, lies in breaking the isolated barriers between traditional disciplines and achieving the collaborative cultivation of multiple dimensions of abilities through systematic knowledge reconfiguration and teaching resource integration. This teaching model not only emphasizes the organic connection between basic disciplines such as linguistics and mathematics and application fields such as art and science, but also pays more attention to cultivating students' problem-solving abilities and interdisciplinary thinking patterns. Current educational research shows that integrated teaching demonstrates significant advantages in enhancing students' cognitive flexibility, innovative thinking, and practical application abilities, and has become a strategic direction of global education reform.

In recent years, China's education system has been actively promoting the innovation of teaching paradigms. The Ministry of Education has clearly proposed to deepen curriculum integration reform and vigorously advocate the cross-disciplinary blended teaching model. This teaching concept breaks through traditional disciplinary barriers and emphasizes the organic integration of multiple disciplinary knowledge networks to cultivate learners' comprehensive thinking abilities and innovative practical qualities. The international education field increasingly values the development trend of cross-disciplinary integrated teaching models. Many top academic institutions and educational research organizations in Europe and America have demonstrated through empirical studies that this teaching paradigm that breaks through traditional disciplinary barriers can significantly enhance students' systematic thinking abilities and innovative literacy.

This innovative educational paradigm of integrated teaching is reshaping the contemporary educational landscape. Its core value lies in breaking through the inherent boundaries between traditional

disciplines and constructing a cross-disciplinary knowledge network system. Educational research shows that this integrative teaching model can effectively stimulate learners' intrinsic motivation and cultivate systematic thinking and complex problem-solving abilities during knowledge transfer. From the perspective of educational development laws, as teaching theory and practice continue to evolve, integrated teaching will gradually become an important direction of basic education reform. Its multi-dimensional educational value not only manifests in the knowledge acquisition aspect but also lies in shaping versatile talents with cross-disciplinary integration capabilities. This educational transformation has profound significance for adapting to the needs of future society.

3. The Relationship between Artificial Intelligence and Curriculum-based Ideological Education

The deep penetration of artificial intelligence in the field of education is reshaping the traditional teaching paradigm. The language arts subject, as a key carrier for ideological cultivation in the basic education stage, urgently needs to explore the path of intelligent transformation in the technological wave. This integration not only involves the innovation of teaching methods, but also encompasses philosophical reflection on the essence of education: while maintaining the core value of ideological and political education unchanged, how to achieve a qualitative change in teaching efficacy through technological empowerment; on the basis of maintaining the interaction between teachers and students as the main body, how to coordinate the dialectical relationship between human and machine collaboration; within the framework of upholding the integrity of the educational goal, how to grasp the scale of local optimization of technological tools. This educational transformation with characteristics of the times requires educators to examine the dynamic balance between technology and human-oriented education from a more macroscopic perspective.

Firstly, in the modernization process of ideological and political education, the introduction of artificial intelligence technology presents a dialectical unity relationship between the basic framework and innovative elements. Ideological and political education, as the main channel for cultivating socialist builders and successors, its fundamental task has always been to shape students' correct value orientation, complete personality cultivation, and strong social responsibility. This core essence constitutes the unshakable foundation of educational practice. While artificial intelligence technology serves as a revolutionary force at the methodological level, it injects a new technological dimension into traditional ideological and political education through precise push of intelligent learning systems, scenario construction of virtual reality, and learning behavior diagnosis through big data analysis. This integration is not a substitution of the educational essence, but a deep attempt to optimize the educational process through technological means, maintaining the ideological determination of ideological and political education while achieving the educational forms which keeps pace with the times, and ultimately achieving the organic unity of the seriousness of theoretical indoctrination and the vividness of teaching methods.

Secondly, in the process of promoting the deep integration of artificial intelligence technology and ideological and political education, it is necessary to dialectically grasp the eternal proposition of technological innovation and the essence of education. The personalized learning system empowered by artificial intelligence, intelligent teaching assistance platform, and collaborative learning mode do indeed inject digital vitality into traditional ideological and political education. However, it is necessary to be aware that these technological means' innovations always serve the fundamental mission of shaping souls and educating people. Contemporary educators, while using intelligent algorithms to analyze student situations and build knowledge maps, should also adhere to the original intention of humanistic education, and regard the cultivation of socialist core values, the inheritance of traditional cultural essence, and the shaping of a complete personality as the ultimate standards for measuring educational effectiveness. This educational philosophy inspiration is that technological iteration changes only the form and efficiency of knowledge dissemination, while the core of education, which shapes the spiritual world and cultivates cultural confidence, remains an unshakable value origin that no technological revolution can undermine.

Furthermore, when discussing the integration of intelligent technology and ideological and political education, it is necessary to deeply grasp the dialectical relationship between the teaching subject and the technical support carrier. As the core subject of education, teachers' professional authority and the responsibility of education should not be weakened by the intervention of technology. Instead, they should strengthen their teaching leadership by mastering the educational methodology of artificial intelligence, becoming a dual responsible person of value guidance and knowledge transmission. As the student group as the main body of digital learning, their personalized development needs are precisely responded to through technology carriers such as intelligent learning systems, cloud resource libraries, and adaptive interaction platforms. This technological empowerment is not only reflected in the intelligent push of teaching resources and real-time feedback of learning situation analysis, but also in the construction of a virtual-real integrated immersive learning field, ensuring that ideological and political education maintains the seriousness of ideology while also having the adaptability characteristics of the technological era. The technical carrier is always a tool-like existence serving the essence of education, and its ultimate value still depends on the educator's grasp of technological ethics and the application of teaching wisdom.

The deep integration of artificial intelligence technology with ideological and political education essentially reflects the dialectical unity relationship among all elements within the educational system. This integration is not only a natural outcome of the evolution of modern educational concepts, but also the inevitable path to adapting to the transformation of educational paradigms in the intelligent era. During this process, educators need to rationally define the boundaries between technological tools and the essence of education, and apply artificial intelligence scientifically to the ideological and political infiltration aspects of university teaching. By constructing intelligent teaching scenarios, it is not only possible to effectively enhance students' critical thinking abilities, but also to systematically cultivate

their sense of patriotism and social responsibility, enabling students to acquire core competencies for the future and laying a solid foundation for adapting to the rapidly changing social environment. This educational innovation not only maintains the essential attributes of ideological and political education, but also expands the breadth and depth of educational implementation through emerging technologies.

4. The Pathways of Artificial Intelligence Enabling Ideological Education in University Courses

4.1 The Teaching Design Approach

At the forefront of contemporary educational reform, artificial intelligence has become the core driving force for teaching innovation. Its deep integration with university ideological and political education is opening up new dimensions for the educational model. By integrating intelligent algorithms with the educational connotation of value guidance, higher education institutions are exploring a new path of moral education empowered by technology. They are reconfiguring the teaching content framework through the cognitive modeling capabilities of deep learning systems, optimizing the efficacy of ideological dissemination through natural language processing technology, and building a more comprehensive value guidance system based on knowledge graphs. This integration is not only reflected in the intelligent upgrade of teaching methods, but also deepens the practice of the "all-round education" concept. It enables ideological and political education to maintain its ideological essence while acquiring the characteristics of precision, individualization, and interaction, ultimately forming a new paradigm of curriculum-based ideological and political education unique to the era of artificial intelligence.

First, when integrating artificial intelligence technology with ideological and political education in higher education, it is necessary to establish a systematic goal-setting system for education. This interdisciplinary integration not only needs to inherit the dual missions of imparting professional knowledge and guiding values in traditional ideological and political education, but also should focus on cultivating students' core competencies in the era of artificial intelligence. Specifically, the curriculum design should go beyond the mere technical application level, guiding students to deeply understand the ethical dilemmas, social impacts, and cultural connotations involved in artificial intelligence technology, so that they can critically examine the complex social changes brought about by technological development while mastering professional skills, thereby truly achieving the organic unity of technological literacy and humanistic spirit, and cultivating well-rounded talents with both professional competence and social responsibility.

Second, from the perspective of curriculum content construction, integrating artificial intelligence technology into the ideological and political education system of universities requires systematically integrating core teaching materials with teaching value. As an important carrier of ideological guidance, university ideological and political courses contain rich cultural traditions, core values, and ethical and moral requirements. These ideological resources have a deep interaction with the development of artificial intelligence technology. In the specific teaching implementation process, teachers can

carefully select diverse teaching resources such as classic works, popular science literature, and cutting-edge reports related to artificial intelligence themes. By guiding students to deeply understand the underlying logic, application scenarios, and social effects of intelligent technology, they can be inspired to conduct multi-dimensional dialectical thinking and value judgment from the perspective of ideological and political education.

Third, in the context of artificial intelligence reshaping the higher education ecosystem, the teaching of ideological and political courses in higher education urgently needs to break away from the traditional one-way indoctrination model and shift to a more inspiring teaching mode. Currently, it is necessary to build a learner-centered interactive classroom ecosystem. Through carefully designed inquiry-based learning scenarios, typical case analysis and collaborative tasks can be combined to stimulate students' enthusiasm for autonomously constructing a knowledge system. The core value of this teaching transformation lies in cultivating students' multi-dimensional critical thinking abilities, not only mastering the basic theoretical framework, but also developing the ability to deeply analyze complex social issues and the ability to creatively solve problems in interdisciplinary contexts. Teachers should act as learning guides, designing challenging real-world discussion fields, allowing students to naturally internalize core values in the collaborative inquiry process, while exercising their systematic thinking and innovative practical abilities, and ultimately achieving the organic unity of knowledge acquisition, ability cultivation, and value guidance.

Fourth, in the process of promoting the deep integration of artificial intelligence and university ideological and political education, building a scientific and complete teaching evaluation mechanism is of crucial significance. The current educational evaluation system generally has a knowledge-based bias and there is a significant gap with the innovative talent cultivation goals advocated in the era of artificial intelligence. This requires teachers to break away from the traditional single evaluation mode based on paper-and-pencil tests and shift to a more process-oriented and development-oriented multi-dimensional assessment system. Through the introduction of multi-dimensional evaluation methods such as project-based learning outcome assessment, classroom critical thinking performance observation, and social practice report analysis, it can objectively reflect students' real growth in core competencies such as critical thinking and innovative practice, and effectively test the internalization effect of ideological and political elements, ultimately achieving the organic unity of knowledge acquisition, ability cultivation, and value guidance. This transformation of the evaluation paradigm not only conforms to the inherent requirements of educational transformation in the intelligent era, but also guarantees for implementing the fundamental task of fostering virtue.

Finally, in the process of innovating the ideological and political teaching system of university courses, the implementation path of artificial intelligence empowerment needs to build a multi-dimensional systematic framework. This framework should focus on cultivating students' cognitive abilities in intelligent technology and their ethical awareness. It should carefully select teaching materials that integrate professional knowledge and ideological and political elements, adopt intelligent interactive

teaching methods, and establish a dynamic and multi-dimensional learning effect evaluation mechanism. Through this comprehensive teaching design, it not only promotes the comprehensive development of college students in aspects such as moral cognition, scientific thinking, and social responsibility, but also realizes the organic unity of intelligent technology application and ideological and political education in the higher education context. Thus, it drives the collaborative and innovative development between the modern education system and the advancement of artificial intelligence technology.

4.2 The Teaching Implementation Path

The implementation path of teaching implementation of ideological education in university courses empowered by artificial intelligence can be carried out from the following aspects:

- (1) Setting of teaching objectives:
- 1. It should focus on guiding students to establish a scientific national consciousness and cultural identity. By introducing typical cases in the field of artificial intelligence and the latest technological trends, the younger generation can deeply understand the strategic significance of national technological independent innovation, thereby consciously forming a sense of responsibility for national development and cultural confidence.
- 2. It should focus on cultivating students' innovative thinking traits and problem-solving abilities. Through the practical application of artificial intelligence technology, it can stimulate students' interest in exploration and cultivate their creative thinking and scientific methodology.
- 3. It should attach importance to enhancing students' digital literacy. By systematically applying digital teaching resources and network technology tools, it can cultivate students' ability to identify information and the level of technological application, so that they have the necessary knowledge reserves and innovation capabilities in the tide of the information age.

(2) Selection of teaching content:

- 1. Artificial intelligence technology is reshaping the modern education ecosystem with unprecedented depth and breadth. As educators in the intelligent era, it should systematically integrate artificial intelligence knowledge into teaching practice. Through the concrete display of typical application scenarios such as intelligent voice assistants and image recognition systems, students can intuitively understand the working principles of machine learning algorithms and natural language processing and other core technologies.
- 2. Integrated teaching should not only focus on the transmission of technical ontology knowledge, but also need to guide students to dialectically think about the disruptive impact of AI technology on traditional teaching models, including the construction of personalized learning paths, the innovation of educational evaluation systems, and the transformation of knowledge acquisition methods.
- 3. Educators should actively explore the practical application of intelligent teaching platforms. Through adaptive learning systems, intelligent grading tools and other technical means, it can create a dynamic learning support system for students. In this process, special attention should be paid to cultivating

students' critical thinking, so that they can not only make good use of AI tools to improve learning efficiency, but also clearly recognize the ethical dilemmas and social risks that may arise from the application of technology. This transformation of teaching paradigm requires teachers to reposition their roles, from knowledge transmitters to learning designers and thinking guides.

(3) Selection of teaching methods:

- 1. Stimulate students' interest and participation: It should organize activities such as the science and technology festival and innovation competitions for students, and have them conduct practical and project research on artificial intelligence, to stimulate students' learning interest and innovative consciousness.
- 2. Focus on students' cooperation and communication: It should guide students to learn and apply artificial intelligence technology in teams, cultivate their communication and collaboration skills, and share their achievements through presentations and speeches, promoting communication and cooperation among students.
- 3. Incorporate evaluation methods of artificial intelligence: It should design assignments and evaluation methods related to artificial intelligence, use intelligent learning systems or automatic grading software to provide students with immediate feedback and personalized learning guidance, helping them improve academic performance.

(4) Role and capabilities of teachers:

- 1. Teacher as a leader: Teachers should pay attention to the latest development of artificial intelligence technology, constantly update their knowledge reserves, and lead students to understand and learn related knowledge.
- 2. Teacher as a collaborator and counselor: Teachers should closely cooperate with other subject teachers, integrate across disciplines, and jointly explore the application of artificial intelligence in different disciplines, providing students with diversified learning experiences.
- 3. Teacher as a guide and evaluator: Teachers should promptly guide students' learning and practical activities, help them solve problems and improve abilities, and evaluate students' learning outcomes through various forms. At the same time, it can also stimulate students' innovative consciousness and problem-solving abilities, cultivate their awareness and ability to actively participate in technological development, and contribute to the advancement of the country's science and technology.

5. The Conclusion

In the context of the contemporary innovation and development of higher education, exploring the deep integration of artificial intelligence and the teaching of ideological and political education holds significant theoretical value and practical significance. This article systematically studies how artificial intelligence technology can inject new vitality into college ideological and political education courses. From the perspective of technological empowerment, it deeply analyzes the intrinsic connection between artificial intelligence and ideological and political education as well as their interaction

mechanism. By clarifying the basic principles of artificial intelligence education application and the essential requirements of ideological and political education construction, this article focuses on exploring the transformation path of ideological and political teaching mode supported by intelligent technology, including key links such as intelligent teaching design, personalized learning support, and teaching effect evaluation, aiming to provide theoretical support and practical guidance for building an ideological and political education system with contemporary characteristics.

References

- Deng, G. B., Zhang, R., & Liu, C. X. (2023). Research on the Construction of Collaborative Education Mechanism for Ideological and Political Work in Universities in the New Era. *School Party Building and Ideological Education*, (02), 25-27.
- Feng, J. H. (2025). Exploration of the Application of Generative Artificial Intelligence in Integrated Curriculum Teaching of Undergraduate and Postgraduate Levels. *Beijing Education (Higher Education)*, (11), 62-64.
- Liu, X. J. (2025). Enabling Ideological and Political Education in Courses through Generative AI: Technical Application Boundaries and Ethical Considerations [A] 2025 Higher Education Development Forum Teaching Reform Sub-forum Proceedings (Volume 1) [C]. Henan Private Education Association, Henan Private Education Association, 2.
- Lu, H., Gong, Z., & Zhao, J. F. (n.d.). Research on the Reform of Python Programming Experiment Teaching with Two-way Infiltration of Artificial Intelligence and Ideological and Political Education. *Software Guide*, 1-6.
- Ma, W. (2025). Exploration and Practice of the Path of Ideological and Political Education in Engineering Courses under the Background of Artificial Intelligence. *Shaanxi Education (General Edition)*, (11), 40-41.
- Pan, H. Z., Yu, X. M., Wang, B., & Du, X. X. (2025). Case Teaching of Ideological and Political Education in the Principles of Artificial Intelligence Course. *Journal of Science of Normal University for Girls*, 45(10), 68-72+93.
- Rao, Y. H., Lei, Z. Q., Lin, Z. C. et al. (2023). Teaching Design and Implementation of Ideological and Political Education in Artificial Intelligence Courses. *Western Quality Education*, 9(20), 48-51.
- Wang, S. P., & Cha, L. L. (2024). Implementation of Ideological and Political Education in University Courses: Unveiling the Theoretical Cracks of "Transmission of Knowledge" and "Education". China Higher Education, (21), 60-64
- Wu, D., & Yang, Z. H. (2023). Innovation of Ideological and Political Teaching Mode in Universities Enabled by Artificial Intelligence. *Journal of Hebei University*, 14(05), 82-84+87.
- Xu, Q. F., & Liang, X. M. (2024). New Exploration of Synergistic Education through "Ideological and Political Education" and "Ideological and Political Course". *Ideological and Theory Education Guide*, (04), 134-141.

- Zhao, S., & Jiang, J. (2023). Thoughts on Enabling Chinese Language Teaching with Artificial Intelligence. *China Information Technology Education*, 2023(02), 70-74.
- Zhou, W. J., Liang, K. J., Hou, X. J., Liu, H. P., Yu, Z. J., & Wang, F. F. (2025). Integration Path and Application Mechanism of AI Technology and Ideological and Political Education in University Practical Teaching. *Modern Horticulture*, 48(22), 182-184.