

Ideology and Politics as the Core, AI as the Reshaper: Exploration of the Innovative Talent Training Model in Higher Education Institutions

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Abstract: Cultivating strong ideological and political leadership is an inherent requirement for building a powerful education nation. The widespread application of artificial intelligence (AI) in education injects new momentum into enhancing this leadership. Against the backdrop of AI applications, the development of innovative talent training in higher education institutions has also been supported by ideological and political education, achieving better-than-expected results. Therefore, this paper focuses on the theme “Ideology and Politics as the Core, AI as the Reshaper: The Innovative Talent Training Model in Higher Education Institutions.” It elaborates on the significance and functions, proposes specific implementation paths, constructs a more scientific and advanced talent training model, and strengthens the accuracy and pertinence of ideological and political education.

Keywords: Innovative talent training in higher education institutions; AI; Ideological and political education

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1. Introduction

The Third Plenary Session of the 20th Central Committee of the Communist Party of China pointed out that education, science and technology, and talent are the fundamental and strategic supports for Chinese-style modernization. When carrying out talent training, schools must not ignore the supporting role of education and science and technology. Instead, they should accurately grasp the inherent laws and development logic among the three, optimize educational methods through technological means, and thereby improve the quality of talent training. Higher education institutions should also comply with the technological development trends of the AI era, introduce advanced technical means to optimize the content and form of ideological and political education, and achieve the goal of cultivating innovative talents.

2. Significance of Carrying Out Ideological and Political Education in the Innovative Talent Training of Higher Education Institutions from the Perspective of AI

(1) Improving the Effectiveness of Ideological and Political Leadership through AI-driven Precise Supply

Enhancing the effectiveness of ideological and political leadership requires abundant educational resources as the foundation. Under the traditional training model, university counselors mostly rely on their own efforts to obtain and compile ideological and political education resources, which is inefficient and prone to omissions^[1]. With the advent of the AI era, the way of acquiring teaching resources has changed. University counselors now have more options, such as making full use of AI tools to integrate and process a large amount of teaching resources. They can leverage AI's powerful data processing, deep learning, and content integration capabilities to obtain more resources for ideological and political education and provide precise supplies based on students' actual situations to meet their needs. This not only enhances the vitality of ideological and political education but also improves the effectiveness of ideological and political leadership^[2]. From the perspective of technical application principles, the application of AI in university ideological and political education can promote the innovation and reform of knowledge production paradigms through various models, and improve the educational effect of ideological and political leadership through the precise supply of rich resources.

(2) Enhancing the Value of Ideological and Political Leadership through AI-enabled Human-Machine Collaboration

Deepening value recognition is one of the specific manifestations of ideological and political leadership, directly related to whether the ideological and political education carried out by university counselors can be deeply rooted in students' minds and translated into actions^[3]. For university counselors, it is crucial to use appropriate methods to explain the principles contained in ideological and political education in a "profound, thorough, and vivid" way. As an advanced technology widely used in the digital age, AI is redefining the traditional teacher-student relationship in the field of education. Driven by the iterative update of AI, the university ideological and political education model has transformed from single-subject indoctrination to human-machine collaboration. The application of AI highlights the characteristics of in-depth interaction in human-machine collaboration, helps create a favorable ideological and political education environment for teachers and students, and strengthens the effects of teacher-student interaction, student-student interaction, and human-machine interaction. Compared with the traditional one-way knowledge indoctrination, the application of AI in ideological and political education by university counselors can better leverage advantages to narrow the distance with students, enable students to deeply participate in the process of ideological and political education, and gradually form a sound and mature subjective cognition and strong value recognition through in-depth interaction with others and the environment^[4].

(3) Raising the Emotional Temperature of Ideological and Political Leadership through AI's Embodied Intelligence

The application of AI in university ideological and political education activities provides students with more learning scenarios, allowing them to learn theoretical knowledge and vivid cases from multiple dimensions. In particular, the integration of AI with advanced technologies such as big data, 5G, cloud

computing, virtual reality, and digital twins has provided more opportunities for the development and innovation of ideological and political leadership education^[5]. This effect is achieved because the application of various digital technologies has spawned a new immersive education model for university ideological and political education. Both counselors and students can fully engage with technical support and efficiently complete teaching and learning tasks on the basis of the harmonious unity of physical and psychological immersion. The most prominent manifestation is that university counselors can give full play to AI's functional advantages, accurately simulate educational scenarios according to the requirements of ideological and political education and students' diverse needs, enabling students to resonate emotionally in practical, innovative, and interesting contexts, thereby perceiving the emotional temperature of ideological and political leadership. For example, if conditions permit, university counselors can organize students to visit red education venues to listen to AI digital humans tell revolutionary stories. In this process, AI digital humans can leverage embodied intelligence to generate explanatory content in real time, guide students, and narrate revolutionary stories, making them feel as if they have traveled back to the revolutionary era, allowing them to understand the great deeds of revolutionary ancestors and perceive their spirits firsthand. The construction of such immersive and face-to-face human-machine interaction scenarios better reflects the application advantages of AI in ideological and political education and highlights the emotional temperature of ideological and political education.

3. Paths for Carrying Out Ideological and Political Education in the Innovative Talent Training of Higher Education Institutions from the Perspective of AI

(1) AI Empowers the Transformation of Ideological and Political Education Methods

To expand the empowerment channels of university ideological and political education, we need to base ourselves on the goal of fostering virtue through education, give play to the advantages of technologies such as AI, and start from aspects such as precise implementation of ideological and political education through digital portraits and precise promotion of core values through algorithm recommendation^[6].

1). Precise Implementation of Ideological and Political Education through Digital Portraits from the Perspective of AI

University counselors should use big data technology to obtain data related to college students' ideological behaviors, and then use AI for in-depth analysis and mining to draw group portraits and individual portraits of college students, providing data support for the targeted implementation of ideological and political education activities in the later stage. Subsequently, university counselors should construct an ideological and political education goal system with reference to these two types of portraits and collected relevant information, refine it from the "knowledge dimension," "skill dimension," and "character dimension," and generate lower-level educational goals such as "understanding new knowledge of ideological and political education in the intelligent era," "improving higher-order thinking abilities to adapt to the intelligent society," and "cultivating and developing correct outlooks on life and values."

University counselors will achieve better results by organizing and implementing specific education around ideological and political education goals. In the process, they should pay attention to reflecting the differences in students' personalized development and design hierarchical education activities based on students' portraits.

For example, university counselors use big data, AI, and other technical means to draw group portraits of freshmen, sophomores, and juniors as well as individual portraits of each student, and design hierarchical, targeted, and classified ideological and political theme education activities based on their learning stages. For freshmen who need to establish lofty ideals, clarify their learning goals in college, scientifically formulate study plans, and pursue development and progress, the school mobilizes freshmen counselors to carry out ideological and political education activities focusing on “ideal and belief education, adaptability education, mental health education, and training of student backbones,” covering topics such as “Traffic Safety,” “Patriotic Education,” “Establishing a Correct View of Love,” “Drowning Prevention Safety Education,” “Interpersonal Communication Skills,” “Official Document Writing Skills,” “Healthy Diet and Work Rest,” “Traditional Culture and History Education,” “Dormitory Safety Education,” and “Anti-Telecom Fraud Education.” For sophomores who need to enhance goal awareness, improve professional skills, and strengthen a sense of responsibility, sophomores counselors design a series of ideological and political education activities themed on “patriotic education, mental health education, career planning education, anti-fraud education, integrity examination education, and student knowledge expansion,” focusing on building “strong ideology, strong moral character, and strong abilities.” For juniors who need to enhance professional awareness and employment competitiveness, junior counselors carry out a series of ideological and political education activities centered on “one resume, one teaching demonstration, one-minute self-introduction, one skill display, and one teaching design,” covering topics such as “Job Hunting,” “Workplace Life,” and “Career Development.”

2). Precise Promotion of Core Values through Algorithm Recommendation

The application of AI in university ideological and political education can realize intelligent information identification and analysis, as well as intelligent information supply. In the AI era, college students’ channels for receiving information are no longer limited to textbook knowledge and teacher teaching, but are more from the Internet and social media. The expansion of information reception channels has deepened their exposure to diversification, globalization, and informatization. Students’ values have gradually become more open, and they are more inclusive of different cultures and viewpoints. However, due to their lack of sufficient knowledge reserves and life experience, they may face difficulties in correctly screening and judging a large amount of information. If they are influenced by incorrect values, it will interfere with their healthy growth. It is very difficult for university counselors alone to fully understand students’ values, but with AI, they can conduct in-depth mining of students’ behavioral patterns, interests, hobbies, and values through algorithm models to find the inherent laws hidden in their ideological dynamics. This not only helps university counselors gain an in-depth understanding of changes in students’ ideological dynamics but also facilitates better guidance and shaping of students’ ideas and values. After extensively collecting students’ data through technical means, university counselors can use neural networks and deep learning algorithms for intelligent analysis, screen out words highly accepted by college students, integrate core values into algorithms, and guide algorithms with mainstream values to enhance the positive guiding value of ideological and political education.

(2) AI Empowers the Expansion of Ideological and Political Education Scenarios

With the research and development of theories related to modern biology, the term “ecology” has also been applied in the field of AI. The so-called “AI ecology” refers to the construction of complex systems using AI technology to show the interwoven interactive relationships among various elements such as technology, industry, talent, and mechanisms. University counselors can refer to the concept and connotation of “AI ecology” to build a new environment for ideological and political education supported by AI.

The application of AI in education has restructured the relationships among various participating subjects, making schools no longer the sole center of knowledge transmission, teachers no longer the sole leaders of teaching, and students able to obtain resources and information from various channels. Driven by AI, subjects such as schools, enterprises, and institutions have collaborated to create a more open educational environment. In addition to traditional educational institutions such as schools, many enterprises and social institutions have also launched online education platforms and tools. These means and approaches can promote the development of new scenarios for ideological and political education, enabling AI to be more widely applied in new scenarios. Sino-foreign cooperative universities can learn from the experience of some well-known domestic universities in building new AI-enabled ideological and political education paradigms, explore new paths for intelligent empowerment of ideological and political education in the AI era around the ternary structure of “counselor-intelligent agent-student,” highlight the role of university counselors in ideological and political education, and further stimulate students’ enthusiasm for participating in ideological and political education. Schools can build AI systems to integrate ideological and political education resources, as well as knowledge in fields such as academic support, employment guidance, and career planning, to form professional databases. This allows university counselors to efficiently complete information integration, drafting of ideological and political education plans, and data statistics with the help of intelligent assistants. They can also use data modeling to predict the development trends of students’ ideas and potential risks in ideological and political education, and design targeted ideological and political education plans with reference to the suggestions and optimization ideas provided by intelligent assistants. Schools have also built four safety lines: “controllable content, risk shielding, interface anti-counterfeiting, and test support,” enabling AI systems to give full play to their application value in ideological and political education while effectively avoiding data leakage risks arising from information interaction.

4. Conclusion

With the widespread application of AI in education, university ideological and political education is facing reform opportunities brought by technological iteration and updating. The application of AI not only optimizes and innovates the content and model of university ideological and political education but also helps university counselors improve the effect of ideological and political education with its unique technical and functional advantages. If university counselors can reasonably and standardizedly apply advanced technical means such as AI, it can bring positive impacts on the reform of ideological and political education concepts, the transformation of educational methods, and the expansion of educational scenarios. However, they should also pay attention to the challenges and risks brought by technological applications. University counselors should not refuse to introduce AI into ideological and political education due to fear of risks. Instead, they should continuously explore scientific and reasonable strategies and methods to build a new path of ideological and political education featuring human-machine collaboration and regulation first. While adhering to the political nature and educational essence of ideological and political education, they should use technological innovation to empower the improvement of the effectiveness of ideological and political leadership, making ideological and political education an important support for effectively cultivating innovative talents.

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