

Research on the Path of Integrating Artificial Intelligence into Ideological and Political Education for College Students

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Abstract: The rapid development of artificial intelligence technology has brought profound opportunities for transformation to ideological and political education in colleges and universities, while also triggering multidimensional challenges. This article analyzes the four dimensions of intrinsic logic, value implications, risk challenges, and response strategies, exploring how artificial intelligence technology reshapes the practical model of ideological and political education and how to adhere to the essence of education in the empowerment of technology, and proposes systematic solutions, with the aim of providing theoretical support and practical reference for the innovation of ideological and political education in the new era.

Keywords: Artificial intelligence; Ideological and political education; Path

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1. Introduction

In the new era, artificial intelligence, along with the widespread application of educational digitization, is gradually transforming the practical field of ideological and political education in colleges and universities, injecting new momentum into its transformation and innovation. How to effectively integrate artificial intelligence technology into the ideological and political education system in colleges and universities, realizing the modern transformation of the education model and the in-depth improvement of education quality, has become a key issue in the new era. Therefore, it is necessary to clarify the internal logic, value implications, and risks and challenges of the combination of artificial intelligence and ideological and political education, to build a practical path for the combination of artificial intelligence and ideological and political education, and to provide useful ideas and directions for maintaining innovation in ideological and political education.

2. The intrinsic logic of integrating artificial intelligence into ideological and political education for college students

2.1. The diversification of the educational subject and the integration of human and machine

The traditional model of ideological and political education primarily focuses on one-way transmission, with educators taking the lead in content planning, instructional design, method selection, and evaluation implementation. The modern model shifts towards two-way interaction, emphasizing equality and autonomy between educators and learners and establishing a new type of educational relationship based on mutual subjectivity, which enhances the quality and efficiency of teaching. Artificial intelligence technology promotes in-depth interaction between the subject and object in ideological and political education at universities, with students, as the core object, no longer merely passive recipients but becoming participants, experiencers, and feedback providers in the educational process. Both parties in education grow together in symbiotic interaction, becoming promoters of communication and interaction. At the same time, the application of digital technology breaks down time and space constraints, achieving seamless human-computer integration and deep fusion, leading to a transformation in the ecosystem of ideological and political education and presenting a new situation of “human-computer symbiosis, everything connected.”

2.2. The segmentation of the educational process and intelligent guidance

The “uniform indoctrination” strategy in traditional ideological and political education often overlooks individual differences among students, failing to effectively follow the value transformation trajectory from acceptance to internalization and then to externalization. In contrast, intelligent ideological and political education can leverage digital technology to shift the educational process from traditional experience-driven to data-driven ^[1]. The combination of artificial intelligence technology with targeted strategies has propelled a new transformation in the educational process. By analyzing data and constructing learner profiles, teachers can meet the individual needs of students, gain real-time insights into students’ thoughts and behaviors, and deliver customized educational content and teaching methods. This mechanism effectively stimulates students’ enthusiasm for learning. Moreover, intelligent guidance, through technologies such as emotional recognition and scenario simulation, enhances the interactivity and precision of education. Customized teaching methods provide detailed guidance at critical growth junctures, paving the way for differentiated and refined strategies in ideological and political education. These two aspects demonstrate the integration of educational technology innovation with humanistic care, amplifying the impact of education through digital technology.

2.3. The simulation of the educational scenario and the three-dimensional perspective

Education is not an environment of its own, but an environment that has been transformed with a specific mission. Artificial intelligence, with its powerful computing power, data processing technology, and advanced voice and image recognition technology, converts static ideological and political course knowledge into dynamic digital content, building a highly simulated virtual educational environment for teachers and students ^[2]. This simulation is not limited to the physical space but extends to the reproduction of multi-dimensional situations such as society, history, and culture. Educators use advanced technologies such as virtual reality and augmented reality, cleverly integrating cognitive auxiliary tools, rich technological resources, and multimedia elements, supplemented by an emotionally rich atmosphere, carefully constructing “immersive” and “multi-dimensional” teaching situations, creating a learning environment that feels like being there for students, narrowing the distance between the educational object and the narrative object in the form of spatial text, greatly enhancing

the appeal and persuasiveness of ideological and political education. The simulated educational scenario makes the content of ideological and political education more prominent, allowing students to experience in practice and gain insights through experience, expanding the breadth and depth of ideological and political education through the reproduction of virtual scenarios. The construction of a three-dimensional perspective promotes the sharing, connection, and cohesion of educational resources, providing strong support for building an all-process and all-around educational pattern with cross-domain presence and cross-border collaboration, leading a new paradigm of ubiquitous learning characterized by universality, sociality, flexibility, and connectivity.

3. The value implication of integrating artificial intelligence into ideological and political education for college students

3.1. Precision education: From “flood irrigation” to “precision drip irrigation”

Through big data analysis, machine learning, and other technologies, artificial intelligence can collect data on students’ thoughts, emotions, behaviors, and other aspects in real time, build a “digital portrait,” and accurately identify individual needs. For example, by analyzing students’ online behavior and classroom feedback, AI can recommend customized learning content to achieve accurate matching between educational content and needs. This “targeted education” mode breaks through the traditional “one-size-fits-all” teaching limitations and significantly improves the effectiveness of education.

3.2. Resource integration: Building an educational ecology integrating virtual and real conditions

Artificial intelligence technology promotes the expansion of educational resources from a single entity space to the “intelligent field” of the combination of virtual and real. Virtual reality (VR) technology can restore the red historical scene and enhance students’ immersive experience; the intelligent ideological and political platform can integrate high-quality resources inside and outside the school to form a “big curriculum system.” For example, through the “classroom on the air” breaking through the time and space restrictions, students can have access to diversified learning resources at any time.

3.3. Model innovation: Enhancing teaching efficiency under human-machine collaboration

Artificial intelligence assists teachers in data collection, student situation analysis, and effect evaluation, freeing up teachers’ energy to focus on high-level tasks such as instructional design and emotional guidance. For example, an intelligent evaluation system generated by artificial intelligence can quantify teaching effectiveness, helping teachers dynamically adjust their teaching strategies and form a positive interaction of “human-machine collaboration.”

3.4. Value guidance: Integrating scientific and technological empowerment and humanistic care

Artificial intelligence technology converts abstract theories into concrete content (such as animations and interactive cases) through multimedia forms to enhance students’ cognitive identity. At the same time, its data-driven characteristics help to strengthen the communication efficiency of socialist core values. For example, they recommend the content of the theme through algorithms and subtly shape students’ values.

4. The risk and challenges of integrating artificial intelligence into ideological and political education for college students

4.1. The impact of instrumental rationality on the essence of education

Dependence on artificial intelligence may lead to education becoming a “data game,” with algorithmic recommendations potentially exacerbating the information cocoon and weakening critical thinking. If the evaluation system focuses solely on quantitative indicators, it may overlook implicit dimensions such as emotions and values. Students’ acceptance of artificial intelligence varies, with some holding negative attitudes. After the introduction of artificial intelligence, the role of teachers needs to change, focusing on the student learning process. This requires teachers to possess educational skills, and students need to have the ability for autonomous and collaborative learning. The prospects for the application of artificial intelligence in education are broad, but social acceptance is key. The novelty and complexity of the technology may cause resistance and concern, making government policy support crucial.

4.2. The alienation of the relationship between teachers and students and the weakening of the subjectivity

The intervention of artificial intelligence may weaken teachers’ dominance and reduce interaction between teachers and students. With the replacement of virtual teaching assistants, the emotional connection between students and teachers may be diluted. Moreover, students’ reliance on artificial intelligence tools could hinder their ability to think independently. While artificial intelligence and the integration of ideological and political education in colleges and universities offer many conveniences for both educators and learners, they also inevitably subject all teaching activities to the rationality of intelligent programs. The virtualization characteristics of intelligent tools can overshadow individual rational thinking, shaping perceptions of people and objects based on the utility-driven design of artificial intelligence. This shift may lead to an overemphasis on artificial intelligence’s utility, resulting in a deviation from the rational practice of ideological and political discourse. Consequently, the sincerity and authenticity of educational discourse between educators and students may be compromised, leading to a certain degree of informational overload^[3].

4.3. Data ethics and privacy and security risks

Large-scale data collection involves students’ privacy protection issues. If the data is improperly managed, it may cause information leakage or abuse. Artificial intelligence systems that do not follow the “minimum necessary principle” may overcollect sensitive information and even be used for non-educational purposes. In the field of ideological and political education, the improper application of artificial intelligence technology may lead students to accept the wrong values and may even be exploited by specific interest groups. The application of artificial intelligence in education relies on the support of large amounts of data, which requires educational institutions to collect and process large learning data sets. However, this process inevitably touches on the sensitive issues of personal privacy protection and data security. From the perspective of humanism, the special nature of ideological and political education of college students has brought challenges to the integration of artificial intelligence technology. The field of education involves core elements such as values, ideology, and ethics, and the intervention of artificial intelligence technology may cause interference or impact on these elements.

4.4. Displacement of technology application and educational demand

Some universities have blindly introduced artificial intelligence technology, leading to “intelligence for the

sake of intelligence.” Certain intelligent systems have redundant functions and complex operations, which instead increase the burden on teachers; the conceptual differences between technology providers and educators may also lead to a disconnect between tool design and actual needs. In universities, ideological and political education and artificial intelligence technology belong to different academic fields, and the current talent cultivation system has not yet achieved effective integration of the two^[4]. Managers and teachers of ideological and political education find it difficult to master artificial intelligence technologies such as data analysis and structured and visualized data profiling in the short term, and these skill gaps limit the integration of artificial intelligence with ideological and political education. The lack of compound talents with a background in ideological and political education and the ability to apply artificial intelligence technology also constrains the integration process. In addition, the formulation of technical standards is an issue that needs to be considered in the integration process. Although China advocates the application of artificial intelligence technology in higher education, a specialized technical standard system has not yet been formed.

5. The realistic path of integrating artificial intelligence into ideological and political education for college students

5.1. Strengthening the essence of education: Balance between instrumental rationality and value rationality

A people-oriented approach has been emphasized, with technology serving as an auxiliary tool. The auxiliary nature of artificial intelligence tools must be clearly defined to ensure that they do not surpass educational objectives. Algorithm design should be guided by teachers to align recommended content with the goals of ideological and political education. An emotionally intelligent system should be developed, incorporating artificial intelligence tools with emotion recognition capabilities. By utilizing natural language processing technology, students' emotions can be detected, and timely psychological counseling can be provided. Through the study of professional literature, participation in academic activities, and engagement in relevant courses, teachers' understanding of artificial intelligence can be enhanced. Proficiency in data structures, machine learning, and other related fields should also be acquired. Additionally, AI tools such as recommendation systems and Q&A systems should be effectively utilized to process information and data in ideological and political education. To support this, professional training for ideological and political educators should be offered by colleges and universities. Certification programs should be implemented to establish a qualified team of educators proficient in artificial intelligence technology and its practical applications.

5.2. Optimizing technology application: Accurate demand and dynamic adaptation

A “demand-technology” matching mechanism should be established. Educational challenges must be identified through research, and appropriate artificial intelligence tools should be selected accordingly. For theoretical courses that may be perceived as unengaging, VR technology should be implemented to enhance immersive teaching experiences. A robust data governance framework must be established. Data collection standards should be formulated, while privacy security should be ensured through anonymous processing and encryption transmission technologies. A third-party supervision mechanism should be introduced to prevent data misuse. To achieve deep integration between artificial intelligence and ideological and political education, the digital transformation of educational resources must be advanced. The primary focus should be on producing and sharing high-quality digital content while ensuring its accessibility.

Collaboration between universities and professional institutions should be promoted to develop a digital

content platform. Furthermore, the digital teaching process should be strengthened by building both teaching management and online learning platforms. Artificial intelligence technology should be integrated into these platforms to cultivate a habit of usage among teachers and students. At the same time, special attention must be given to data security. As digital ideological and political education resources are developed, the risks of hacker attacks and data breaches may be encountered. To mitigate these threats, artificial intelligence education security must be enhanced from the perspectives of policy, law, and technology, ensuring that teachers and students can utilize digital resources safely.

5.3. Improving the main body ability: The two-way empowerment between teachers and students

A team of “intelligent literacy” teachers should be cultivated. Training in artificial intelligence technology is conducted to enable teachers to master human-machine collaboration skills. The use of artificial intelligence by teachers is facilitated for analyzing learning situations, designing personalized teaching plans, and stimulating students’ subjectivity. Through artificial intelligence interaction debates and virtual practice projects, students are guided to think actively and avoid cognitive inertia caused by technological dependence.

Familiarity with modern science and technology should be ensured among teachers, allowing technology to be applied rationally while maintaining a people-oriented approach. The role of technology should be optimized to create a positive educational environment. In colleges and universities, teacher training programs should be strengthened to enhance both technical literacy and professional educational competence. Professional training courses, teacher exchange activities, and other initiatives should be organized to promote the overall quality of educators.

Close attention should be paid to the development trends in artificial intelligence technology to ensure that teaching content and methods are updated in a timely manner to align with contemporary advancements. Collaboration between universities, technology companies, and research institutions should be reinforced to jointly promote AI education. Through such partnerships, universities can access the latest technology and educational resources, while technology companies and research institutions can transform research findings into practical applications.

Moreover, deeper exploration and integration of ideological and political education content with artificial intelligence technology should be undertaken to achieve educational objectives. The training and education of both educators and students should be strengthened to enhance their proficiency in using artificial intelligence education platforms and tools while preventing potential risks and challenges. The deep integration of ideological and political education with artificial intelligence should be prioritized, ensuring that excessive technological intervention is avoided and that the humanistic essence of education is preserved.

Teachers should actively acquire modern scientific and technological knowledge, including artificial intelligence. Simultaneously, the appropriate application of technology in ideological and political education should be emphasized, avoiding overreliance on technology and the superficial pursuit of technological effects. A people-oriented approach should be maintained, ensuring that technology serves as an auxiliary tool rather than a replacement, thereby fostering a positive ideological and political education environment.

5.4. Improving the institutional guarantee: The establishment of ethical norms and long-term mechanisms

Ethical guidelines for artificial intelligence education should be developed, with clear boundaries set for

technology application, prohibiting the use of artificial intelligence for student behavior monitoring or value scoring. A multi-party coordination mechanism should be established, where the government, universities, and enterprises collaboratively formulate technical standards, create “artificial intelligence + ideological and political” industry-university-research platforms, and promote the deep integration of technological research and educational needs.

Universities should establish data protection mechanisms to ensure the security of learning data and personal privacy. From a technical perspective, data should be anonymized, managed, and regulated. Education administrative departments should enhance the management system, define their responsibilities, and support the application of artificial intelligence in educational innovation. Relevant legislation and regulatory mechanisms should be continuously updated to standardize the use of artificial intelligence in ideological and political education, ensuring fairness and safety in the educational process.

Additionally, students should receive guidance and supervision to cultivate their ability to identify information and prevent exposure to misinformation. Ethical and legal considerations should be emphasized to ensure that innovative models remain lawful and compliant. Policy guidance and management norms should be improved to stimulate educators’ enthusiasm for innovation and promote the sustainable development of artificial intelligence in ideological and political education. Collaboration with policy departments should be strengthened to refine policies, integrating general education with professional knowledge to enhance practical application capabilities.

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Disclosure statement

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