

Exploring Pathways for the Deep Integration of Artificial Intelligence into Ideological and Political Education in Higher Education Institutions

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Abstract: *With the deep integration of artificial intelligence into ideological and political education in higher education institutions, innovative dynamics are stimulated. In contrast, multiple practical risks emerge simultaneously, including the mainstream ideological front being under attack, privacy breaches that violate students' rights, algorithmic bias that exacerbates social discrimination, and standardized quantitative assessments that stifle natural talent. This paper argues that the pivotal approach for integrating artificial intelligence into ideological and political education lies in adhering to putting people first and innovating on the basis of what has worked in the past. Building upon this, systematic innovation pathways are explored: strengthening the mainstream ideological front, safeguarding students' data security and privacy rights and interests, preventing algorithmic bias and social discrimination, and establishing a diverse evaluation framework based on Human-Machine Collaboration. Only through the coordinated implementation of these multiple pathways can artificial intelligence be guaranteed to function as a booster rather than a substitute for fostering virtue through education. Ultimately, high-quality development of ideological and political education can be achieved under the unity of technological empowerment and value guidance.*

Keywords: Ideological and Political Education, Artificial Intelligence, Value Orientation, Paths to Innovation.

1. Introduction

At present, artificial intelligence is rapidly transforming people's daily lives, and "AI + N" is emerging as a new trend across all industries. Issues such as smartphone addiction, algorithmic bias, and information cocoons are increasingly posing challenges to the new environment of ideological and political education, significantly impacting traditional teacher-student relationships, teaching content, and methods of value guidance. How ideological and political education can adapt to changing times, address the risks and challenges posed by artificial intelligence, and forge a path of innovation has become a critical issue today.

2. The Value and Significance of Deeply Integrating Artificial Intelligence into Ideological and Political Education in Higher Education Institutions

There is no doubt that the rapid development of artificial intelligence technology has created new opportunities for reform and innovation in ideological and political education at universities. Artificial intelligence not only helps make ideological and political education in higher education institutions more targeted, but also promotes the informatization of resources for such education. In addition, artificial intelligence can overcome the temporal and spatial constraints of traditional ideological and political education, thereby promoting the integration of the ideological and political education process in higher education institutions.

2.1 Artificial Intelligence Promotes Precision in Ideological and Political Education in Higher Education Institutions

In traditional universities, ideological and political education primarily relies on educators' experience to assess students' ideological trends; this model is ill-equipped to capture individual cognitive differences. Educators can use artificial intelligence to collect multidimensional information—such as data in classroom interactions, online comments, and records of participation in social practice activities—to accurately identify students' intellectual concerns and developmental needs and tailor teaching content accordingly. Specifically, before class, AI can help teachers identify key points and challenging topics; during class, AI can provide real-time feedback on student performance, enabling teachers to make dynamic adjustments to their teaching strategies.; After class, AI can track the evolution of students' thinking, providing data to support future instruction; Consequently, ideological and political education enhances the precision of its teaching by accurately identifying the varying needs of its students.

2.2 Artificial Intelligence Promotes the Digital and Intelligent Transformation of Ideological and Political Education Resources in Higher Education Institutions

Artificial intelligence technology can systematically integrate ideological and political education resources across different platforms, thereby addressing the challenges faced by ideological and political education in higher education institutions—such as outdated content, limited platforms, and uneven resource distribution—that lead to low teaching efficiency. First, AI can transform classic texts and policy documents into a digital repository with searchability, linkability, and real-time updating. Second, AI can recommend appropriate educational materials based on educational objectives and students' cognitive profiles; Third, AI-driven virtual simulation technology can transform revolutionary sites, historical scenes, and other locations into immersive digital resources, making ideological and political

education free from the constraints of time and space, and ensuring that online educational resources promote positive values.

2.3 Artificial Intelligence Promotes the Integration of Ideological and Political Education Processes in Higher Education Institutions

Since the issuance of the “Work Plan for Comprehensively Promoting the Construction of the ‘Great Ideological and Political Course’” in 2022, efforts to advance the Construction of the “Great Ideological and Political Course” have been gaining momentum. This means that ideological and political education is a systematic undertaking. Artificial intelligence technology can play a role throughout the entire process of ideological and political education: For educational stakeholders, AI-driven information-sharing platforms can break down information barriers among stakeholders, enabling multi-party collaboration among people, across courses, and among AI agents. Across various course categories, AI can identify elements of ideological and political education embedded in each course. Faculty members teaching supporting courses integrate value-oriented guidance into the transmission of knowledge, thereby promoting the synergistic development of ideological and political education within the curriculum and dedicated ideological and political courses. In the teaching dimension, AI can track students’ intellectual performance across various contexts—such as campus life and social practice—and link disparate educational scenarios into a coherent educational pathway. As a result, ideological and political education has evolved from a fragmented approach to a systematic, integrated one, achieving educational outcomes characterized by seamless transitions between educational stages and continuity of content.

3. Risks and Challenges Posed by the Deep Integration of Artificial Intelligence into Ideological and Political Education in Higher Education Institutions

Artificial intelligence is a double-edged sword when it comes to ideological and political education; if used improperly, it will inevitably give rise to numerous challenges: Ideological challenges, privacy breaches, algorithmic bias, and issues related to the standardization of quantitative assessments, among others. These issues not only hinder the deep integration of artificial intelligence into ideological and political education, but may also undermine the educational effectiveness that ideological and political education itself should achieve.

3.1 The Mainstream Ideological Front Is Under Attack

For a long time, the internet has been flooded with harmful content such as extreme individualism, bourgeois liberalism, and historical nihilism, while the practical application of artificial intelligence is based on a utilitarian technological logic, and the content recommended to users is closely tied to their long-term behavioral habits. Under the algorithm’s rules, user actions such as browsing and clicking generate corresponding data records. If a user accidentally clicks on a

page promoting negative values, the AI system will assume that the user endorses those views and, based on the user’s recorded tags, push content that sensationalizes, trivializes, and radicalizes those negative values. This causes AI applications to stray from the correct path, undermines the main ideological front, and hinders the cultivation and practice of sound values among young students.

3.2 Privacy Breaches Violate Students’ Rights

In recent years, the widespread adoption of artificial intelligence technologies has significantly increased the risk of data breaches. Among these, the use of facial recognition technology has been a major source of data breaches; this technology helps users simplify account verification. After users grant authorization and set up identity verification using facial recognition, the app will automatically recognize their identity each time they open it. However, ensuring the reliability and security of this identification process is extremely difficult. If information such as students’ home addresses, health status, and household composition is leaked, it will pose a threat to their personal safety, especially in the context of ideological and political education. The teaching process often involves sensitive data such as students’ values; a privacy breach would not only infringe on students’ right to privacy but also undermine the foundation of trust between teachers and students. Furthermore, if the leaked data is analyzed improperly, it could lead to students being mislabeled, thereby affecting the fairness of educational evaluations.

3.3 Algorithmic Bias Exacerbates Social Discrimination

Individual bias is localized, while machine bias is systemic. Biases generated by individuals tend to fade over time, but biases generated by artificial intelligence will not naturally dissipate over time unless intervention is taken. “When an algorithm discriminates against you, it’s because there are certain traits about you that the algorithm doesn’t like [1].” Under the influence of algorithms, bias can be amplified from the local level to the overall level; this bias primarily stems from stages such as data collection, algorithm design, model training, and feature input. When artificial intelligence uses existing data to predict future trends or inputs subject characteristics into a problem domain, these processes may result in differential treatment based on factors such as gender, religion, or ethnicity. Personalized recommendation systems, which appear to be objective, are in fact built with subjective judgments embedded within them in pursuit of maximum user retention. Specifically, with the support of artificial intelligence algorithms, bias has taken on new forms and manifests differently across various fields. People’s perceptions are increasingly shaped by recommended content, and biases exist between the audiences of different recommendations; people are gradually becoming self-imposed “frogs in a well,” unwilling to engage with those who hold different views. This keeps students in a homogeneous information environment for extended periods, undermining their willingness to embrace diverse values; At the same time, when amplified by algorithms, biases are cloaked in a veneer of scientific legitimacy, making it easy for students to mistake stereotypes based on gender, region, and other factors for facts—which directly conflicts with the

principles of equality and fairness advocated by ideological and political education. Students who are constantly exposed to biased information become isolated from one another, which undermines the cultural dissemination function that ideological and political education is meant to fulfill.

3.4 Standardized Quantitative Assessments Stifle Natural Talent

Applying artificial intelligence technology to ideological and political education may result in impersonal data stifling students' enthusiasm. No two leaves in the world are exactly alike; every individual possesses a uniqueness that cannot be replicated. Among educational activities, learners possess both individuality and commonalities; educators must take both aspects into account, and artificial intelligence can be used to effectively assess students' various qualities. The advantage is that it allows for the fair evaluation of a large number of students based on easily quantifiable metrics in a short period of time; however, the use of artificial intelligence in assessment can stifle students' creativity, and because the technology lacks agency, it cannot understand human talent and potential. Previous research has shown that "creativity is a perceptible product—deemed both novel and effective—generated by an individual or group within a specific social context through the interaction of three factors: talent, process, and environment [2]." Artificial intelligence-based educational assessment technologies classify data according to predetermined standards through analysis and synthesis; however, when students are subjected to such a quantitative evaluation system over the long term, they often lose their motivation. This evaluation method is particularly detrimental to ideological and political education. Because the goal of ideological and political education is to shape values and foster political identity; these deep-seated factors are difficult to quantify and are fundamentally at odds with the logic of standardized assessment; If we insist on using quantitative metrics to measure the effectiveness of ideological and political education, we may narrow the goal of "cultivating virtue and fostering talent" down to mere testing of memorized knowledge, thereby deviating from the original intent of ideological and political education.

4. Innovative Approaches to Deeply Integrating Artificial Intelligence into Ideological and Political Education in Higher Education Institutions

In light of the risks and challenges that artificial intelligence poses to ideological and political education, if we are to truly harness AI to invigorate the intrinsic vitality of ideological and political education, we must adhere to the principles of putting people first and innovating on the basis of what has worked in the past. Respecting the inherent educational principles of ideological and political education and the objective logic of artificial intelligence development, and specifically addressing the challenges involved in their deep integration, we will explore innovative pathways for the deep integration of artificial intelligence into ideological and political education in higher education institutions in the new era.

4.1 Strengthening the Mainstream Ideological Front

On the one hand, we must leverage new media to promote and disseminate mainstream ideology and values. For example, by leveraging new media channels popular among young students—such as short-video platforms, educational WeChat official accounts, and smart mini-programs for ideological and political education—mainstream ideological content can be transformed into light, engaging, and interactive communication products, allowing mainstream values to permeate students' daily, fragmented learning and living scenarios. At the same time, we encourage ideological political education teachers and young students to create new media content that combines intellectual depth with broad reach, leveraging the targeted delivery capabilities of artificial intelligence. Deliver mainstream ideological content to a wider audience that is interested in it, and strengthen students' understanding of and identification with mainstream values through interactive exchanges. Harness the combined efforts of online and offline education to expand the influence of the mainstream ideology in the online sphere of higher education institutions.

On the other hand, algorithmic recommendations must be guided by mainstream values. We should establish an algorithm scrutiny mechanism guided by mainstream values, conduct value-based audits of models used by Machine Learning platforms, and ensure the political alignment of recommended content. At the same time, harmful information must be filtered in accordance with mainstream values to ensure that educational content aligns with the mainstream ideology.

4.2 Safeguarding Students' Data Security and Privacy Rights

The application of AI technology must be based on the fundamental premise of ensuring the security of student data and protecting students' privacy rights. Therefore, the first step is to clarify who holds data sovereignty. Data such as students' ideological reports and classroom comments—which involve deep-seated values—are the property of the students themselves. AI systems may only extract non-identifiable features for the purpose of improving teaching; they must not collect biometric data such as facial information or voiceprints that can identify individuals. It is strictly prohibited to use classroom data for display purposes unrelated to education and teaching. Second, we need to improve the technical infrastructure for privacy protection. Promote the implementation of privacy protection technologies, such as data encryption, on the ideological and political education platform, and conduct data analysis without exchanging personal data, thereby reducing the risk of privacy breaches from a technical perspective. Third, education authorities should work with departments such as cyberspace administration and public security to conduct regular data security compliance audits to ensure that students' privacy and data security are not compromised.

4.3 Preventing Algorithmic Bias and Social Discrimination

To prevent algorithmic bias, a coordinated approach is needed

that addresses the issue from both the perspectives of technological research and institutional regulation. First, we must establish value-based review criteria for the ideological and political education corpus to eliminate samples containing stereotypes and cut off the input of bias at the source; Second, fairness constraints should be incorporated during the model training phase to ensure that the algorithm proactively avoids discriminatory treatment during the optimization process; Third, a system of manual review should be implemented, with educators having the final say on major decisions involving student evaluations, resource allocation, and other key matters. In terms of regulatory oversight, first, establish a system for reviewing the transparency of algorithms used in AI-powered ideological and political education tools, requiring platforms to disclose the core logic behind content ranking; Second, the use of algorithms to label students based on sensitive characteristics is expressly prohibited. Third, establish a routine monitoring mechanism to ensure that the system remains bound by the principles of fairness and justice at all times while operating efficiently.

4.4 Establishing a Diverse Evaluation Framework Based on Human-Machine Collaboration

Standardized quantitative assessment undermines individuality by ceding evaluative power entirely to algorithms. To counter this, we propose an evaluation framework grounded in “human-machine collaboration and multi-stakeholder participation.” Crucially, the assessment of ideological and political education should prioritize the subject’s value reconstruction and moral self-awareness, as such inner processes are inherently opaque and cannot be adequately represented by linear models of overt behavior.

Second, establish a mechanism for collaboration among diverse stakeholders. Specifically, ideological and political education instructors serve as the primary guides and are responsible for making professional assessments of the depth of students’ theoretical understanding; Counselors are responsible for conducting daily assessments of students’ behavior and ethical conduct; Students provide peer validation through group discussions; parents supplement this with information about their children’s thoughts and behaviors outside of school. Multiple stakeholders hold regular joint meetings to reach comprehensive evaluation conclusions through collective analysis.

Third, respect students’ right to appeal. If a student disagrees with the evaluation results, he or she has the right to submit a request for review to the College’s Academic Advisory Committee within the specified time limit. A comprehensive review of the AI’s raw data and evaluation records from all parties must be conducted. Only in this way can we integrate formative assessment with summative assessment, thereby fully respecting students’ individualized development while ensuring that the quality of ideological and political education remains on track and does not deviate from its intended course. Ultimately, this will achieve the assessment goal of promoting students’ intellectual growth and all-around development.

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