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Research on the Application of Artificial Intelligence in the Digital Transformation of University Ideological and Political Work

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Abstract: With the continuous penetration of artificial intelligence (AI) in higher education, the organizational mechanisms and implementation logic of ideological and political education are undergoing new evolutionary trends. These technologies have been widely embedded in key aspects such as teaching management, student services, and value guidance, playing an increasingly prominent role in student status recognition, precise information distribution, and dynamic behavioral interventions. In the practice of ideological and political education in universities, intelligent systems have had a profound impact on the way educational content is supplied and the modes of interaction, shifting the approach from being experience-driven to data-guided. Meanwhile, the task structure of university education scenarios has become more complex, with highly heterogeneous student behaviors, value orientations, and demand preferences, leading to significant challenges for traditional ideological education models in terms of response efficiency and intervention accuracy. Against this background, this paper, based on the trend of digital evolution in ideological and political work in universities, systematically outlines the logical structure and key pivot points in the process of AI integration. It further proposes a fusion strategy composed of "intelligent perception–collaborative services–data-driven" to provide theoretical support and practical pathways for the intelligent transformation of the education system in the new era.

Keywords: University ideological and political courses; Artificial intelligence; Teaching reform; Digital transformation; Interdisciplinary integration

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1. Introduction

Higher education is entering a deep phase of comprehensive digital transformation, with technology deeply embedded in various aspects of educational governance, teaching organization, and student development, reshaping traditional educational mechanisms and work paradigms. Ideological and political work in the university, as a key component of cultivating moral integrity and fostering talent, is also facing dual pressures

of conceptual innovation and method updating. Traditional ideological and political education has long played an irreplaceable role in the education practice, relying on human-centered approaches and experience-based methods. However, in the context of the new era, it has gradually exposed practical bottlenecks, such as a single communication pathway, outdated content delivery, slow response speeds, and insufficient data support, making it difficult to accurately address the increasingly diversified, complex, and concealed ideological dynamics of students.

Currently, the rapid development of new-generation information technologies, represented by big data, natural language processing, intelligent interaction, and deep learning, has injected new vitality into ideological and political work in universities. Intelligent technologies can not only achieve the perception and recognition of students' ideological states, comprehensively analyze behavior patterns, and personalize the matching of educational resources, but also effectively reduce burdens and increase efficiency in areas such as task processing, content generation, and risk warning. These technologies have become an important support for building the "intelligent ideological and political education" system in the new era. From the perspective of technological evolution, the integration of "AI + Ideological and Political Education" in universities has entered a key stage, transitioning from "exploratory pilot programs" to "systematic construction." On the one hand, the combination of ideological and political education with artificial intelligence is evolving from shallow information dissemination to deep emotional interaction, cognitive guidance, and value identification. On the other hand, the integration of AI has also raised numerous practical issues, such as educational ethical risks, data security concerns, and the tendency of technological dependence, which urgently need to be regulated and guided at the top-level design stage.

Against this backdrop, this paper takes the digital transformation of ideological and political work in universities as a starting point, focusing on the deep integration path of artificial intelligence technology. It aims to conduct a systematic analysis from three levels: first, to review the typical challenges and development trends faced by university ideological and political work in the digitalization process; second, to extract the mechanism logic of AI empowerment in ideological education and construct a technology integration model centered on "intelligent perception–collaborative services–data-driven decision-making"; and third, to propose practical and feasible optimization strategies, combining real-world cases and cutting-edge achievements, with the goal of providing theoretical support and practical pathways for building the intelligent ideological and political education system in the new era.

This research not only responds to the realistic needs of the transformation of ideological and political work in university from "experience-driven" to "data-supported," and from "human execution" to "intelligent collaboration," but also has positive significance for accelerating the construction of a high-quality education system, promoting the implementation of the "Three All-round Education" mechanism, and achieving the deep integration of technology and values [1].

2. The digital transformation pressures and technological integration opportunities in ideological and political work in universities

2.1. Practical bottlenecks in ideological and political work in universities

Guided by the strategic goal of "cultivating moral integrity and fostering talent," the ideological and political education system in universities has formed a relatively stable operational model in terms of institutional design, work norms, and organizational structure. However, at the implementation level, structural issues in real-life scenarios are increasingly becoming evident. First, the update speed of educational content and expression

methods lags behind the evolving trajectory of students' values. Currently, universities still predominantly rely on offline lectures, which lack content adaptation mechanisms for heterogeneous student groups. This model struggles to effectively resonate emotionally and engage students cognitively, leading to inefficient educational activities.

At the same time, the dynamic monitoring of students' ideological states still relies primarily on the judgment of counselors, mainly using offline communication and surveys, with limited coverage, delayed responses, and difficulty forming information feedback loops. In particular, in areas such as psychological abnormality identification and behavioral risk early warning, there is a lack of data support and intelligent analysis tools, making interventions susceptible to subjective misjudgment, further weakening the precision and effectiveness of the work.

2.2. Conflicts and adaptation barriers in the process of digital evolution

The penetration of emerging technologies in the educational field has created opportunities for the precise advancement of ideological and political work in universities. However, the tension between technological systems and educational philosophy is also becoming increasingly apparent. On the one hand, the "efficiency logic" embodied by artificial intelligence differs from the "value logic" of ideological and political work in terms of goal orientation and path design. Without a reasonable integration mechanism, technology could be misused as a formal tool, undermining the humanistic warmth and emotional depth in the educational process.

On the other hand, the acceptance and adaptability of teachers to technology constitute a key factor in the integration gap. Currently, most front-line ideological and political educators have not established a systematic understanding of technology and operational skills, and lack the ability to embed AI tools into their daily work. In the absence of institutionalized technical training and an incomplete task support system, the phenomenon of "tools being available but unused" is quite prominent in some universities.

Furthermore, existing data platform constructions in universities commonly face issues such as closed interfaces and dispersed systems, which make it difficult to effectively connect student behavioral data, ideological feedback, and management records. Counselors often have to switch between platforms when accessing information and building student profiles, leading to serious problems of data redundancy and process fragmentation, which further restrict the practical application value of intelligent methods.

2.3. Risks and adjustment needs in the application of technology

The application of artificial intelligence in the ideological and political education scenes in universities, if lacking proper guidance and value-driven principles, can easily lead to governance imbalance and ethical risks. Some universities, when introducing AI platforms, overlook the principle of student-centered education, treating technology merely as a performance tool, which causes a structural shift from a "student-centered" approach to an "algorithm-centered" one. Additionally, excessive reliance on model analysis and data pushing may undermine teachers' detailed observation and individualized judgment of students, affecting the depth and warmth of value guidance.

From the perspective of capacity building, there is currently a lack of teacher development mechanisms that align with deep AI integration. The counselor group lacks systematic training in applying intelligent tools, building data literacy, and designing interactive systems, which can lead to a "platform idling" predicament. If the evaluation system still focuses primarily on traditional workload indicators, neglecting teachers' innovative practices and platform efficacy in the digital environment, it will be difficult to stimulate their enthusiasm and

creativity in integrating technology.

To promote the coordinated development of artificial intelligence and ideological and political education in university, systematic adjustments should be made from three dimensions: at the conceptual level, clarifying technology as an auxiliary tool to serve education, ensuring the dominant position of value orientation; at the capacity level, establishing capacity enhancement mechanisms that align with new technologies, and promoting the normalization of digital literacy construction; and at the institutional level, encouraging the open collaboration of data platforms, incorporating platform behavior data into evaluation systems, and stimulating the intrinsic motivation of the counselor team to shift from "passive adaptation" to "active integration" [2].

3. The reconstruction paths of ideological and political capabilities of university counselors and the design of support systems

The in-depth advancement of ideological and political work in the university cannot be achieved without the active involvement and support of the counselor team. With the gradual integration of intelligent technologies, the traditional role positioning and capability structure of counselors are undergoing profound reconstruction. Relying solely on experience-based judgment and interpersonal communication is no longer sufficient to meet the needs of the diverse and complex student work scenarios in the new era. A new capability system must be constructed to adapt to the "technology + education" context, along with a dynamic improvement mechanism and a multi-dimensional support platform, in order to achieve the goal of "technology empowerment–capacity transformation–value return."

3.1. Reshaping the ideological and political capability structure in the context of technology integration

The technological revolution does not simply bring about tool updates, but represents an overall shift in the working methods and capability framework of counselors. From a task perspective, counselors in the new era are required to simultaneously address student affairs, value guidance, data analysis, risk prevention, and platform operations. As a result, their capability dimensions are becoming highly complex. In response to the new requirements for ideological and political practice in the context of artificial intelligence integration, a preliminary "three-dimensional six-capabilities" model can be constructed, corresponding to three major functional dimensions: ideological leadership, technological integration, and educational interaction.

This capability model emphasizes the dual focus on both technology and ideology. Counselors must not only uphold the bottom line of value guidance but also possess certain technological literacy and platform adaptability, so they can effectively perform their roles in the new ecosystem formed by "people–data–platforms."

3.2. Building a systematic path for improving ideological and political capabilities

The improvement of counselors' capabilities cannot rely on intensive training or short-term experience accumulation, but should be designed as a dynamic path covering cognition, practice, feedback, and continuous development. Under current conditions, the capability development path can be composed of the following three stages:

First, at the cognitive level, counselors should be guided to establish the concept of proactively adapting to technology and understand the basic principles of artificial intelligence and its typical application scenarios in university ideological and political work. This helps avoid "tool panic" or "technological blind following."

Basic cognitive knowledge should be popularized through lectures, online courses, and other means to establish the foundational logic of "understanding." In the practical phase, skills training should be embedded through task-driven methods. For example, counselors can enhance their "operational" capabilities in real-life situations by operating AI question-and-answer platforms, participating in student profiling, and engaging in digital education activities. This ensures the transition from theory to practice. In the development phase, a reflection and feedback mechanism should be strengthened. This involves creating a capability growth file and task evaluation system, with peer evaluations, mentor guidance, and work case reviews, to achieve "optimized" dynamic progress.

This path emphasizes relying on real work scenarios, being guided by problem situations, and ensuring continuous feedback, thus avoiding the failure of training due to "disconnect from practice."

3.3. Multidimensional construction of support mechanisms

A capability model and pathway design alone are not sufficient to drive counselors to achieve genuine role transformation. To facilitate deeper integration, a synergistic effort is required in institutional development, platform support, and incentive mechanisms. At the current stage, universities should focus more on the synchronous optimization of foundational mechanisms and the application environment while building an intelligent ideological and political support system.

Given the current state of counselors' digital literacy, the training content on "integration of technology and ideological education" should be systematically and regularly incorporated into the teacher development system. In terms of course resource design, it would be beneficial to base the content on real-life scenarios and develop specialized modules covering dimensions such as AI tool operation, digital expression strategies, and case design capabilities. Through workshops, special courses, and cross-departmental collaborative projects, universities can gradually improve counselors' awareness of technology participation and practical abilities.

In terms of technological platform development, the focus should be on enhancing data flow and service capabilities. Key data related to students' ideological dynamics, psychological states, and growth trajectories in ideological and political education should be integrated and dynamically updated through a unified entry point. To achieve this, a data platform equipped with visualization, intelligent analysis, and risk alert functions should be built, converting various behavioral indicators into information that counselors can directly reference in their daily work, thus enhancing the breadth and depth of information access. The design of the evaluation system also needs to adapt to the trend of technological integration in ideological and political work. The original assessment standards, which mainly focus on quantifying workload, are inadequate in truly reflecting the innovation and generativity of the education process. A more targeted approach would be to introduce process-oriented data indicators and platform behavior records, combining actual performance in content creation, individualized guidance, and the use of data tools, to establish a multidimensional, multi-channel ability evaluation and feedback system, stimulating counselors' intrinsic motivation for continuous improvement.

On the basis of the initial formation of the counselor capability construction pathway and support system, it is necessary to further clarify the systemic strategic framework for AI participation in university ideological and political work. Based on the previous research, a fusion path model composed of perception modules, collaborative mechanisms, and data support can be extracted. This model emphasizes the formation of a complete closed-loop structure, from the dynamic collection of educational contexts to efficient task execution, and then to the feedback utilization of data results [3].

The "perception" phase aims to rely on artificial intelligence technologies to dynamically capture students'

behavioral characteristics, cognitive states, and emotional changes, providing real-time evidence for ideological and political interventions. During task execution, a collaborative mechanism should be constructed based on intelligent push notifications, individual recognition, and early warning prompts, integrating multiple-source task flows between teachers, platforms, and service units. The data support component should convert platform records into structurally valuable decision-making outcomes, covering areas such as teaching content adjustments, mechanism optimization suggestions, and risk management assistance.

The proposal of this model provides a theoretical foundation for the evolution of ideological and political work mechanisms from experience-driven to data-driven, while also laying the structural foundation for the systematic reform of "intelligent ideological and political education" in universities.

Through the collaboration of mechanisms, platforms, and evaluation, this approach not only provides counselors with a stable growth path but also ensures that the deep integration of artificial intelligence into ideological and political practice is both sustainable and practical.

4. Conclusion

The digital transformation of ideological and political work in universities is not only an inevitable trend in the process of educational modernization but also a profound reflection of the "student-centered" concept. Artificial intelligence, as a key force driving the technological revolution in the new era, is gradually being integrated into all aspects of ideological and political education in universities. From the precise perception of students' ideological states to the intelligent collaboration in the education process and the data support for decision-making mechanisms, AI demonstrates its unique value in reshaping the educational model. In the face of significant individual differences among students, diverse expressions of thought, and ubiquitous educational scenarios, traditional ideological and political approaches are struggling to maintain efficiency in response and breadth of coverage. The intervention of technology does not replace the role of teachers but reshapes the educational ecosystem, promoting a transformation in educational logic from being experience-driven to data-driven, from linear management to dynamic perception, and from static instruction to deep interaction.

Starting from practical needs, this study proposes an AI integration path centered on "intelligent perception–collaborative services–data-driven decision-making" and further constructs an intelligent ideological and political capability structure model for university counselors, clarifying the direction of capability reshaping in the context of technology. On this basis, by analyzing the systematic capability development path and supporting mechanisms, the study provides actionable work guidelines. In the future, universities should continue to optimize educational platforms, deepen institutional guarantees, and improve incentive systems to promote the formation of a new ideological and political education paradigm based on "human-machine collaboration." By achieving technology empowerment and systemic reconstruction while adhering to the core values, universities can enable ideological and political education to achieve higher quality and greater effectiveness in the intelligent era.

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Disclosure statement

The author declares no conflict of interest.

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