

Digital Transformation of Ideological and Political Education in the Digital Intelligence Era

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Abstract: The in-depth integration of digital technology and artificial intelligence has driven ideological and political education to accelerate its transformation from traditional, network and digital forms to an intelligent form, which has become an important starting point for implementing the educational digitalization strategy and the fundamental task of moral education and talent cultivation in the new era. Based on historical materialism and the theory of spiritual production, this paper systematically explains the technological evolution context and inherent theoretical logic of the digital transformation of ideological and political education, refines the core value implication of digital empowerment, comprehensively analyzes the three prominent practical dilemmas in current practice, namely thinking cognition, supply-demand matching and subject ability, and combines the latest research results and university practice paradigms to put forward a systematic practical path integrating concept reconstruction, technology empowerment, subject upgrading and scenario innovation, so as to provide theoretical support and practical schemes for promoting the innovation of ideological and political education while upholding the fundamental principles and realizing high-quality development.

Keywords: Digital intelligence era; Ideological and political education; Digital transformation; Moral education and talent cultivation

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1. Introduction

Educational digitalization has become a key breakthrough for China to open up new tracks for educational development and shape new development advantages. The 20th National Congress of the Communist Party of China clearly included “promoting educational digitalization” into the national strategic tasks, pointing out the direction for the innovative development of ideological and political education in the new era. The in-depth integration of digital technology, big data, artificial intelligence, and ideological and political education is no longer a simple superposition of technical tools, but a systematic reform involving educational concepts, teaching paradigms, educational fields, and discourse systems. Driven by the wave of science and technology, ideological and political education has successively presented a clear evolution path of traditional ideological and political education, network ideological and political education, digital ideological and political education

and intelligent ideological and political education. The popularization of generative artificial intelligence has further brought spiritual production into a new stage of digitization, autonomy and socialization, forming an all-round challenge and all-round empowerment to the content supply, subject relationship, method logic and environmental ecology of ideological and political education. Taking the digital intelligence era as the background and digital transformation as the main line, this paper constructs a complete practical path on the basis of clarifying the theoretical logic and diagnosing practical dilemmas, and responds to the era proposition of “what should ideological and political education do under the background of educational digitalization”.

2. Theoretical logic of the digital transformation of ideological and political education in the digital intelligence era

The digital transformation of ideological and political education does not emerge out of thin air, but advances steadily along the track of technological iteration, and obtains internal motivation in the reform of spiritual production mode, eventually forming four core value implications, which together constitute the complete theoretical support for the transformation.

2.1. Evolution of technological forms: Step-by-step iteration from tradition to intelligence

From the perspective of the evolution of technological forms, ideological and political education has achieved step-by-step iteration with the scientific and technological revolution, forming a clear development context. Traditional ideological and political education takes offline physical practice and oral communication as the core, mainly relying on theoretical indoctrination, emotional infection, ritual education and other methods, which is a typical form dominated by individual spiritual labor. In terms of educational fields, the teaching mode combining online and offline has broken the time and space limitations of ideological and political education and can expand the teaching field. The home-school-community interaction information platform can stimulate the educational innovation vitality of teachers, parents and society, and realize multi-party collaborative education^[1]. The mature application of artificial intelligence technology has finally promoted the official emergence of intelligent ideological and political education, which takes data ideological and politicalization and ideological and political dataization as the basic elements, autonomous education as the practical logic, social collaboration as the structural system, and three-dimensional risk prevention as the guarantee mechanism, becoming the most cutting-edge technological form of current ideological and political education.

2.2. Theoretical core: Internal drive of the reform of spiritual production

From the perspective of the internal theoretical core, ideological and political education itself is a special spiritual production practice from the perspective of historical materialism. Technological reform promotes the systematic transformation of ideological and political education by reshaping the means of labor, objects of labor and laborers of spiritual production. Artificial intelligence technology first realizes the digital transformation of spiritual elements. Through in-depth analysis of classic ideological and political cases with big data technology, it extracts the core educational spirit and value core running through all academic stages, and explores the differentiated educational focuses of cases in different academic stages^[2], promoting the transformation of ideological and political education from “teaching-centered” to “learning-centered”. Finally, it realizes the social collaboration of spiritual production, forming a complete social division of labor

system including data annotation, algorithm optimization, model training and computing power support, and promoting ideological and political education from a single school field to an all-society collaborative education pattern.

2.3. Value implication: Four dimensions of digital empowerment

From the perspective of value implication, digital transformation injects new vitality into ideological and political education from four dimensions. First, it realizes cognitive reconstruction. Data-driven approaches break the limitations of traditional empirical judgment, realize the accurate grasp of educational laws and the scientific research and judgment of ideological trends, and greatly improve the scientificity and accuracy of ideological and political education. Second, it promotes resource reorganization, breaks time and space barriers and departmental barriers, realizes cross-domain sharing, multi-modal presentation and intelligent push of high-quality educational resources, and constructs an all-staff, all-domain and all-time resource supply system. Third, it promotes discourse reconstruction, promotes the transformation of educational discourse from grand narrative to micro-expression, presents the organic combination of materials and content in the vivid and dynamic era development, and enhances the vitality of ideological and political courses and ideological and political theory courses^[3]. Fourth, it completes form remodeling, constructs a new educational model of virtual-real integration, human-computer collaboration and ubiquitous learning, realizes immersive experience, personalized education and full-chain evaluation, and provides solid support for the implementation of the fundamental task of moral education and talent cultivation.

3. Practical dilemmas of the digital transformation of ideological and political education in the digital intelligence era

In the process of rapid advancement, the digital transformation of ideological and political education has also exposed a series of in-depth and overall dilemmas, which are concentrated in five aspects: thinking cognition, supply-demand matching, subject ability, technology application and risk governance, becoming prominent obstacles restricting high-quality development.

3.1. Dilemma of thinking cognition: Transgression of instrumental rationality and solidification of traditional thinking

At the level of thinking cognition, the problem of instrumental rationality transgressing value rationality is relatively prominent. Some colleges and universities and educators have fallen into the misunderstandings of “technological formalism” and “techno-centrism”, equating digitalization with the superposition of technical equipment, emphasizing external form over connotation construction, and efficiency improvement over value guidance, leading to the phenomenon of “having technology but no thought, having form but no soul” in the classroom. At the same time, the traditional working mode and educational methods of ideological and political education, such as face-to-face communication, heart-to-heart talk, and one-way knowledge output in classroom teaching, are rigid, which easily makes students feel bored and lack active participation and interactive communication^[4], making it difficult to adapt to the internal requirements of digital transformation actively.

3.2. Dilemma of supply-demand matching: Structural imbalance between supply-driven and demand-oriented

At the level of supply-demand matching, there is a structural imbalance between educational supply and students' diverse, high-level and personalized needs. The current supply mode of ideological and political education is still mainly supply-driven, failing to turn to demand-driven effectively. Some colleges and universities have the phenomena of limited digital teaching resources and insufficient application depth in the digital construction of ideological and political practical teaching ^[5]; the corpus of general educational large models is not perfect, making it difficult to output professional content in line with mainstream ideology accurately; the update of educational content is lagging, empty and outdated, lacking era and pertinence, and unable to effectively respond to students' real ideological puzzles and growth needs. The long-standing supply-demand mismatch directly affects the actual effect of ideological and political education.

3.3. Dilemma of subject ability: Digital literacy gap and alienation of subject status

At the level of subject ability, the coexistence of the digital literacy gap between teachers and students and the alienation of subject status has become a key bottleneck in the transformation. The digital literacy of ideological and political teachers has obvious shortcomings, which are generally reflected in insufficient digital awareness and weak technical operation ability. Some ideological and political teachers only electronically move paper textbooks when using digital technology, and the technical embedding is mainly reflected in the superficial superposition of multimedia forms such as videos and audios, which fails to achieve in-depth integration with teaching content and teaching logic, and is of little help to teaching ^[6].

4. Practical paths of the digital transformation of ideological and political education in the digital intelligence era

To promote the steady and long-term development of the digital transformation of ideological and political education, we must adhere to the core concepts of “upholding the fundamental principles and innovating, educating people with data, and intelligent for good”, and construct a systematic practical path integrating concept reconstruction, technology empowerment, subject upgrading, scenario innovation and risk prevention and control, so as to achieve all-round, in-depth and systematic transformation and upgrading.

4.1. Concept reconstruction: Adhere to the value orientation and establish a new thinking of digital education

At the level of concept reconstruction, we must adhere to the value orientation, firmly establish a new thinking of digital education, and keep the correct direction of transformation. In the interface intelligent transformation marked by technological progress, we should pay more attention to establishing the value dimension of the interface of ideological and political education in colleges and universities with a distinct political orientation, and always take “people” as the fundamental starting point and “morality” as the value foundation ^[7]. We must always adhere to the primacy of value guidance, take moral education and talent cultivation as the fundamental task, take mainstream ideology as the fundamental guide, resolutely prevent technology from replacing value and tools from obscuring the original intention, and realize the organic unity of instrumental rationality and value rationality. We must always uphold humanism and digital ethics, adhere to the essence of education, strengthen emotional care and life dialogue, clarify the boundary of technology application, and establish the

basic ethical principle of “education-oriented, technology as a tool”.

4.2. Technology empowerment: Break data barriers and construct a new system of intelligent empowerment

At the level of technology empowerment, we should fully break data barriers, construct a new integrated intelligent empowerment system, and consolidate the technical foundation for transformation. Accelerate the construction of a university-level integrated ideological and political data platform, break data barriers between colleges, departments and universities, establish unified data standards, construct a full-dimensional data center covering students’ ideology, study, behavior and psychology, and realize data interconnection, resource sharing and intelligent analysis. Transform abstract ideological and political concepts into perceptible content by means of digitalization, and deepen students’ understanding of the connotation of ideological and political education. Through building virtual simulation teaching platforms, developing digital ideological and political projects, and optimizing online-offline mixed teaching modes, realize the in-depth integration of technology, majors and ideological and political education^[8]. Coordinate the joint construction and sharing of high-quality resources, take the initiative to connect with the National Smart Education Platform, build high-standard ideological and political course resource libraries, case libraries and material libraries, promote the digital transformation of red culture and excellent traditional culture, and realize the inclusive supply of high-quality educational resources.

4.3. Subject upgrading: Improve digital literacy and forge a new team of digital education

At the level of subject upgrading, we should systematically improve the digital literacy of teachers and students, forge a high-quality new team of digital education, and activate the internal motivation of transformation. Focus on improving the digital literacy of ideological and political teachers. The improvement of teachers’ digital literacy mainly lies in the deepening of the concept of “regarding data and information as new-quality productivity”, which is not a simple learning of technology application, but an innovation of ideological concepts^[9]. Targetedly enhance students’ digital subjectivity, strengthen education on media literacy, algorithm literacy and information literacy, improve students’ ability of information discrimination, critical thinking and independent learning, help students actively break the information cocoon and prevent digital alienation, and fully stimulate students’ subjective initiative. Accelerate the construction of a multi-party collaborative education subject, form a collaborative education pattern involving schools, families, society, enterprises and technology platforms, and set up a digital governance team composed of ideological and political experts, technical personnel and student representatives to gather strong synergy for digital transformation.

4.4. Scenario innovation: Integrate virtual and real spaces and create a new pattern of all-domain collaborative education

At the level of scenario innovation, we should deeply integrate virtual and real spaces, create a new pattern of all-domain collaborative education, and enrich the practical carriers of transformation. In the context of digital intelligence, colleges and universities should construct virtual immersive teaching scenarios for ideological and political education through VR/AR and other technologies, and integrate multi-modal interaction technologies to strengthen the immersive experience of the environment^[10]. Promote the transformation of ideological and political education from “whole-brain indoctrination” to “whole-body experience”, and enhance students’

emotional resonance and value identity. Create personalized educational scenarios, and provide students with personalized learning plans, differentiated educational content and precise ideological guidance based on accurate digital portraits and intelligent content push, so as to realize the effective connection between students' individual needs and accurate educational supply. Construct ubiquitous learning scenarios, build an all-domain education matrix connecting classrooms, campuses, society and cyberspace, combine theoretical classrooms with social classrooms, and enable students to deepen their theoretical cognition in the infiltration of real national conditions and people's conditions^[11]. Innovate the discourse expression scenario, promote the transformation of educational discourse from preaching to resonance, from abstraction to visualization, and from one-way to interactive, flexibly use network discourse, youth discourse and life discourse, and comprehensively improve the communication effectiveness and emotional temperature of ideological and political education.

5. Conclusion

The digital transformation of ideological and political education in the digital intelligence era is an inevitable choice to adapt to the new round of scientific and technological revolution and industrial transformation, implement the national educational digitalization strategy, and practice the fundamental task of moral education and talent cultivation. Future research can further focus on cutting-edge issues such as the in-depth integration of generative artificial intelligence and ideological and political education, the human-computer collaborative education mechanism, and the digital transformation evaluation system, continuously deepen theoretical innovation and practical exploration, and constantly open up new tracks for the modernization of ideological and political education.

Disclosure statement

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References

- [1] Li S, Gu Y, 2026, A Three-Dimensional Approach to Enhancing the Effectiveness of Ideological and Political Education Through Digital Technology. *Journal of Beijing University of Science and Technology (Social Sciences Edition)*, 42(3): 53–59.
- [2] Zhu Y, 2026, The Effectiveness, Risks and Mitigation of Digital Technology Empowering the Integrated Teaching of Ideological and Political Courses in Primary, Secondary and Tertiary Schools. *Journal of Inner Mongolia Agricultural University (Philosophy and Social Sciences Edition)*, visited on April 27, 2026, <https://link.cnki.net/urlid/15.1207.G.20260409.1349.004>.
- [3] Rao J, 2026, Make Good Use of Artificial Intelligence Technology to Achieve a New Breakthrough in the Construction of “Big Ideological and Political Courses” in Colleges and Universities. *Journal of Jiamusi Vocational College*, 42(4): 139–141.
- [4] Yan N, 2026, Construction of Digital Path for Ideological and Political Education of College Counselors Under the Perspective of Public Collaboration. *Public Relations World*, (8): 199–201.
- [5] Wang S, 2026, Research on the Innovative Path of Digital Empowerment of Ideological and Political Practice

- Teaching in Colleges and Universities. *Journal of Yanbian Education Institute*, 40(2): 6–10 + 34.
- [6] Zhou L, Zhao Y, 2024, The Generative Logic, Real-World Concerns and Promotion Strategies of Digital Textbook Construction for Ideological and Political Courses in Universities. *Tibet Education*, (5): 55–59.
- [7] Zhang C, Wang Z, 2026, Distinctive Features and Countermeasures of the Intelligent Transformation of the Interface of Ideological and Political Education in Colleges and Universities. *Beijing Education (Higher Education)*, (4): 70–72.
- [8] Yan C, 2026, Innovative Construction Strategies for the Ideological and Political Education Curriculum System of Design Majors Under the Background of New Liberal Arts. *Popular Literature and Art*, (7): 181–183.
- [9] Wang X, Li J, 2026, Research on the Empowerment of Red Culture in College Ideological and Political Education Under the Background of Digitalization. *Journal of Social Sciences of Jiamusi University*, 44(4): 95–99.
- [10] Zhang Y, 2026, Research on Immersive Teaching Path of Ideological and Political Education in Colleges and Universities Under the Background of Digitalization. *Public Relations World*, (8): 178–180.
- [11] Le X, Wang Y, 2026, Spatial Shift and Practical Approach in the Construction of “Big Ideological and Political Course”. *Jiangnan Forum*, (4): 83–87.

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