The Development of Humanities and Social Sciences, 2025, 1(3), 100-111
https://doi.org/10.71204/tdhndr96

The Logical Reconstruction and Path Exploration of the Vitality of Ideological and Political Theory Courses in the Era of Artificial Intelligence

Yequan Wang [1,*]

[1] College of Marxism, Anhui Agricultural University, Hefei 230036, China

*** Correspondence**:

Yequan Wang

670765463@qq.com

Received: 14 September 2025/ Accepted: 27 October 2025/ Published online: 3 November 2025

Abstract

Artificial intelligence (AI), exemplified by large-scale models, is reshaping the educational landscape and accelerating the transition from digitalization to intelligent transformation. Ideological and Political (IP) courses face both new opportunities and emerging risks. Anchored in value orientation and educational principles, this paper traces the historical logic of change and identifies key structural challenges: attention dispersion, algorithmic enclosure, and capacity mismatch. We propose a three-dimensional framework of influence. First, a cognitive shift from indoctrination and rote memorization to problem-driven, evidence-based, and reflective learning. Second, a discursive shift from one-way transmission to multi-source co-construction with explicit value interpretation. Third, a relational shift from knowledge mediation to value leadership, instructional design, and data stewardship. Building on this framework, we outline practical pathways for intelligent content iteration, immersive experiences combined with rational debriefing, personalized support grounded in integrity safeguards, and renewed teacher professionalism for human–machine collaboration. Finally, we propose an institutional architecture emphasizing value guidance, collaborative mechanisms, shared resource ecosystems, digital–ethical literacy for teachers, and proportionate data governance. We argue that only through coupling value rationality with technical rationality, under transparent and auditable safeguards, can IP courses enhance their ideological depth, emotional resonance, and practical effectiveness.

Keywords: Artificial Intelligence; Ideological and Political Theory Course; Educational Digitalization; Human–Machine Collaboration; Algorithmic Enclosure

1. Introduction

Artificial intelligence (AI) technologies, represented by large-scale models, are being integrated across the entire educational chain, transforming knowledge production, learning organization, classroom interaction, and governance. This transformation goes beyond a mere media upgrade; it reconstructs the fundamental logic and value order of education (Selwyn, 2019; Holmes et al., 2019).

As a core course for fostering virtue and cultivating talent, the Ideological and Political (IP) course must, while upholding Marxist positions and core socialist values, actively respond to changes in students' cognitive habits, attention structures, and media environments. In practice, AI is reshaping classrooms—from one-way instruction to problem-driven, evidence-based inquiry; discourse is expanding from singular authority to plural collaboration; and teacher–student relations are evolving toward value co-creation (Luckin et al., 2016; U.S. Department of Education, 2023).

The vitality of IP courses therefore rests on coupling value rationality with technical rationality. Value orientation determines the direction, human–machine collaboration defines the path, and institutional safeguards ensure continuity. Only when conceptual renewal, pathway innovation, and institutional optimization interact can IP courses enhance their ideological depth, theoretical rigor, and emotional resonance in the AI era (Holmes, Bialik & Fadel, 2019; UNESCO, 2023; OECD, 2021).

2. The Historical Logic of Ideological and Political Education in the Era of Artificial Intelligence

Education is undergoing a transition from digitalization to intelligentization, marked by structural shifts in pedagogy, learning models, and governance. The Ideological and Political (IP) course is necessarily embedded within this system-wide transformation. The central reform challenge lies in integrating the advantages of artificial intelligence (AI) without compromising the course's value orientation. From a macro perspective, this transformation reveals how intelligentization reshapes educational content, interpersonal relationships, and value formation (OECD, 2021).

2.1. The Paradigm Shift Toward Intelligentization in the Educational Ecosystem

As a general-purpose technology driving the advent of the "intelligent+" era, AI is catalyzing a comprehensive transformation in higher education—advancing from digitalization to networking, and ultimately to intelligentization. Its influence extends far beyond tool substitution; it is fostering a holistic reconstruction of knowledge production, learning modes, pedagogical relationships, and governance structures. From intelligent learning platforms and virtual simulation laboratories to large educational models and adaptive recommendation systems, AI technologies are redefining the architecture of contemporary education.

Learning paradigms are shifting from linear instruction to data-driven, inquiry-based, project-oriented, and immersive learning. The teacher–student relationship is evolving from one-way

knowledge transmission to human–machine collaboration and community-based knowledge co-creation. Simultaneously, teaching evaluation and educational governance are becoming increasingly refined, process-oriented, and traceable through real-time data and learning analytics.

Within this evolving context, Ideological and Political (IP) education—as a cornerstone course dedicated to moral cultivation—must not only preserve its value orientation and theoretical integrity but also respond proactively to the profound changes in students' cognitive patterns and media ecology. Under the guiding principle of value rationality, it is crucial to align technical rationality with educational objectives, thereby constructing a new human–machine co-education paradigm.

The essential reform question, therefore, is how to translate the perceptive, interactive, and computational strengths of AI into enhanced value guidance and educational effectiveness for IP courses—while ensuring that such applications remain interpretable, controllable, and accountable. This forms the core theoretical and practical proposition of ideological and political education in the age of artificial intelligence.

2.2. Structural Risks and Governance Challenges in the Intelligent Era

First, the reconfiguration of the attention economy and classroom order. Algorithm-driven, short-form, and fragmented information flows have reshaped students' media consumption habits. Sustained attention and deep reading are increasingly displaced by instant feedback and sensory stimulation. In this context, rational discussion and systematic reasoning within classrooms are weakened by the hyper-informational structure of modern learning environments. The resulting "attention deficit" not only limits teachers' ability to organize discourse and guide thematic progression but also undermines the depth of theoretical internalization and the stability of value identification among students. Consequently, Ideological and Political (IP) courses face a persistent imbalance between the density of knowledge and the rhythm of its expression.

Second, the proliferation of algorithmic "filter bubbles" and the rising complexity of value guidance. Platform algorithms amplify users' existing preferences through personalized recommendation systems, enclosing students within "echo chambers" that reinforce prior beliefs and weaken reflective reasoning. This narrows the discursive space for public deliberation. For IP education, such an information ecology creates a dual challenge: clarifying both factual judgments and value judgments. Teachers must counteract partial or biased cognition produced by data-driven mechanisms while reconstructing a shared framework of values within pluralistic narratives. As a result, the standards of evidence, reasoning pathways, and evaluative systems in teaching have become increasingly complex and demanding.

Third, the weakening of the teacher's role and the mismatch in competency structures. As AI delivers on-demand solutions for information retrieval, knowledge generation, and task completion, the teacher's traditional role as a knowledge mediator is gradually eroded. Classroom authority is shifting from knowledge scarcity to meaning construction. When teachers lack sufficient digital literacy and fail to evolve from "lecturers" into value-oriented mentors, a "second digital divide" emerges—one where technological resources are abundant but professional competence and ethical oversight remain insufficient. This imbalance fosters the

instrumentalization of teaching processes and the dominance of quantitative evaluation, thereby eroding the fundamental mission of IP education: to cultivate virtue and shape values.

3. The Mechanisms of Artificial Intelligence's Influence on Ideological and Political Education

The integration of artificial intelligence (AI) into education represents more than a technological upgrade. It constitutes a multidimensional transformation—driven by data mining, algorithmic recommendation, and scenario generation—that reshapes knowledge provision, learning models, and teacher–student relationships. Together, these shifts redefine the operational logic of ideological and political (IP) courses. At the cognitive level, learning analytics and adaptive technologies have revolutionized students' approaches to knowledge construction. Classrooms are evolving from one-way indoctrination and rote memorization to learning cycles centered on problem exploration, evidence-based reasoning, and reflective revision. At the discursive level, generative algorithms and recommendation mechanisms have restructured classroom discourse—from unilateral teacher exposition to multi-source co-construction among teachers, students, and intelligent systems. This interactive structure enhances students' sense of agency, participation, and epistemic engagement. At the relational level, the diffusion of intelligent tools and reorganization of teaching processes have weakened the teacher's traditional role as a sole knowledge intermediary, encouraging a transformation toward value guidance, instructional design, and data stewardship.

3.1. Transformation of the Cognitive Paradigm

The introduction of AI is dismantling the traditional cognition model centered on teacher lecturing and student memorization. Historically, classrooms depended on one-way instruction and passive reception, limiting students' ability to form coherent reasoning chains. Under AI's influence, classroom logic is shifting toward a cyclical learning process driven by problem-solving, empirical reasoning, and reflective refinement.

First, learning analytics and adaptive recommendation systems capture students' learning trajectories and cognitive challenges in real time, dynamically adjusting content according to conceptual complexity. This diagnostic–feedback–practice mechanism reduces redundancy and extraneous cognitive load, allowing more time for deep thinking and logical analysis.

Second, intelligent question–answer systems, knowledge graphs, and scenario generation tools contextualize abstract theories within authentic tasks and real-world issues. These systems guide students to engage in evidence-based reasoning and value-oriented judgment during problem-solving.

Third, AI can translate learning behaviors, discussion processes, and revisions into interpretable data chains, helping students develop metacognitive awareness as they formulate questions, collect data, construct explanations, and refine reflections. Through these mechanisms, students evolve from passive recipients to active explorers and meaning constructors. This

transformation deepens the cognitive rigor and logical coherence of IP courses, while fostering the joint cultivation of rational argumentation and conscious value awareness.

3.2. Reshaping of the Teaching Relationship

Artificial intelligence is pushing classrooms toward platformization, algorithmization, and generativity, transforming knowledge delivery from singular authority to diversified collaboration. With intelligent tools, students can independently pose questions, gather information, and generate preliminary answers, while teachers assume the roles of knowledge integrators and value calibrators. Consequently, classroom discourse shifts from one-way transmission to multi-source dialogue, jointly shaped by teachers, students, and intelligent systems. In this process, the teacher's role becomes even more critical. On one hand, teachers must apply academic judgment to correct algorithmic biases and filter informational noise, ensuring the accuracy of knowledge and the rigor of reasoning. On the other hand, they must exercise value leadership—elevating empirical narratives into theoretical insights and aligning technology-mediated discourse with Marxist positions and core socialist values. Thus, AI does not diminish the teacher's authority; rather, it reinforces the teacher's central role as a value interpreter and meaning constructor. This transformation propels IP education from unilateral indoctrination toward multi-source co-creation, cultivating an interactive, reflective, and value-oriented communicative environment..

3.3. Reshaping Pedagogical Relationships

As AI increasingly undertakes information retrieval, assessment, and routine learning tasks, the traditional authority of teachers—once grounded in knowledge scarcity—is eroding. Classroom authority has shifted from information provision to meaning production, prompting a fundamental redefinition of the teacher's role.

First, teachers must become value leaders. Through agenda-setting and evaluative criteria, they offer students clear and stable value orientations amid pluralistic narratives, ensuring that IP courses remain anchored in the cultivation of core socialist values.

Second, teachers must serve as instructional designers. Beyond content delivery, they should leverage data insights from AI to design learning tasks, organize peer evaluations, and plan cross-contextual knowledge transfer. By integrating online and offline, synchronous and asynchronous, and human–machine collaborative modalities, teachers can achieve holistic process optimization.

Third, teachers must act as data stewards. They should delineate data collection boundaries, establish ethical protocols, and uphold governance principles of interpretability, traceability, and accountability. These measures prevent the alienation of technology into tool worship or evaluative fetishism, preserving the humanistic integrity of education.

Only through this triadic transformation—encompassing value leadership, instructional design, and data governance—can teachers sustain their professionalism and irreplaceability in an AI-driven educational environment. Ultimately, the rise of artificial intelligence does not diminish the teacher's significance; rather, it elevates the threshold of competence, urging teachers to evolve from transmitters of knowledge into genuine constructors of value and meaning.

4. Practical Pathways for Empowering Ideological and Political Education through Artificial Intelligence

The value of artificial intelligence (AI) in education lies not merely in tool substitution but in its ability to employ data, algorithms, and contextual generation as key drivers for the systemic reconstruction of curriculum content, learning experiences, individualized support, and teacher competencies. For ideological and political (IP) education, its vitality depends on transforming technological potential into sustained gains in value guidance and competency development. This transformation requires a closed-loop mechanism linking content delivery with learning processes, individual support with faculty development, and ensuring that all innovations operate under institutionalized systems of quality assurance and ethical governance. Only through such an integrated and regulated framework can AI genuinely empower IP education to achieve both pedagogical effectiveness and value-oriented transformation.

4.1. Intelligent Updating and Dynamic Iteration of Classroom Content

Artificial intelligence offers IP courses end-to-end enhancement in topic selection, content organization, and knowledge expression. By applying learning analytics and public opinion data, teachers can precisely identify differences in students' value orientations, interests, and cognitive baselines—shifting lesson preparation from generalized forecasting to evidence-based alignment. Through knowledge graphs and text generation tools, the core concepts, fundamental principles, and contemporary practices of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era can be systematically integrated and presented within a unified logical framework, bridging theory and practice while reinforcing argumentative coherence and the timeliness of examples.

Building on this foundation, dynamic micro-adjustments to content depth and narrative complexity can be made using classroom interaction data and formative assessments, achieving continuous renewal and adaptive iteration—creating "teaching that evolves with context." Simultaneously, adherence to authoritative sources and standardized citation norms enables a dual mechanism of factual verification and value calibration, ensuring political reliability, theoretical rigor, and evidential verifiability within a coherent knowledge structure. Through these mechanisms, IP courses can achieve genuine resonance with contemporary social issues and alignment with students' developmental needs, thus realizing both theoretical vitality and pedagogical relevance.

4.2. Constructing Immersive Learning Experiences and Their Rational Transformation

Effective IP education requires that students generate meaning within perceptible contexts and consolidate consensus through reflective structures. The integration of AI with virtual and augmented reality technologies brings historical and contemporary issues into classrooms in experiential and scenario-based ways. Students may, for example, enter virtual reconstructions of wartime base areas during the Anti-Japanese War to engage in mission-based explorations, or participate in policy simulations and public deliberations on current governance challenges through role-playing and position statements. In such quasi-real environments, learners

experience value conflicts, evidence-based reasoning, and ethical decision-making, linking cognitive understanding with affective and moral engagement.

However, immersion is not the endpoint of instruction. Through teacher-guided debriefing and structured questioning, emotional resonance must be transformed into conceptual clarification and theoretical comprehension, forming a pedagogical chain that progresses "from narrative, to experience, to theory." Complementary multi-evidence assessments—including process-based assignments, peer evaluations, and oral defenses—make learning outcomes observable, interpretable, and traceable. This approach safeguards against technological spectacle and sensory overload, ensuring pedagogical integrity and promoting the rational internalization of values through reflective cognition rather than emotional stimulation alone.

4.3. Personalized Learning Support and Differentiated Guidance Mechanisms

The core value of AI lies in its capacity to facilitate data-driven individualized enhancement. By continuously analyzing students' learning trajectories, performance, and interaction behaviors, AI can generate tiered learning paths and task modules adapted to differences in prior knowledge and interest. This ensures both equitable attainment of learning standards and appropriately differentiated levels of challenge. Real-time questioning and automated feedback lower the threshold for help-seeking, while analytic learning reports identify shared difficulties and individual bottlenecks, providing teachers with a data-informed basis for targeted intervention.

At the level of value guidance, data-informed learner profiling helps reveal conceptual misconceptions and weaknesses in reasoning. Teachers can then organize focused discussions and supplement instruction with relevant cases, avoiding uniform and unreflective ideological transmission. Simultaneously, a robust system of academic integrity safeguards—including originality statements, citation norms, and plagiarism detection—serves as a baseline constraint. These measures, combined with open-book and evidence-based assessments, encourage the legitimate use of intelligent tools while preventing learning substitution and overreliance. In this way, the cultivation of competencies and the internalization of values advance in parallel, ensuring that technological empowerment reinforces rather than undermines the formative mission of IP education.

4.4. Transformation of Teachers' Professional Roles and Restructuring of Competency Frameworks

With the deep integration of AI in education, teachers' professionalism is no longer defined by information scarcity but by their capacity for meaning production and value interpretation. For IP education, teachers must complete a substantive transformation—from knowledge transmitters to value leaders, instructional designers, and data stewards.

At the value level, teachers should take responsibility for agenda-setting and evaluative thresholds, constructing analytical frameworks centered on public issues and guiding students to form stable yet open value orientations within pluralistic contexts.

At the instructional level, teachers should use data insights to design decomposable learning tasks, organize peer evaluations, and facilitate cross-contextual knowledge transfer. By coordinating online and offline, synchronous and asynchronous, and human–machine collaborative modes, teachers can achieve systemic optimization of instructional design.

At the governance level, teachers must define clear boundaries for data collection, specify legitimate uses, and uphold ethical red lines to ensure compliance with the principles of interpretability, traceability, and accountability. These measures prevent the over-quantification and instrumentalization of education, preserving its humanistic essence.

Accordingly, digital and ethical literacy has become a decisive factor in sustaining the vitality of IP education. The extent to which these competencies are cultivated determines whether AI can be transformed into a lasting source of ideological guidance and intellectual empowerment, ensuring that technological progress remains anchored in the moral mission of education.

5. Institutional Guarantees for Enhancing the Vitality of Ideological and Political Education in the Era of Artificial Intelligence

The deep integration of artificial intelligence (AI) into the educational system has ushered ideological and political (IP) courses into a stage of comprehensive restructuring—encompassing content delivery, pedagogical processes, evaluation mechanisms, and ethical governance. To transform technological potential into sustainable educational efficacy, institutional design must serve as the foundational driver. This involves building an interlocking policy and operational framework that reinforces key dimensions such as value orientation, collaborative mechanisms, resource ecosystems, teacher competency development, and regulatory compliance. Only through stable and systematic institutional support can IP education achieve sustainable development and enduring vitality, ensuring that technological innovation remains aligned with the moral and educational mission of cultivating virtue and shaping minds.

5.1. Principle Construction of Value Orientation

In a context where technical rationality coexists with value rationality, the foremost task of institutional design in IP education is to establish a normative order in which “values take precedence, and technology serves as an instrument.” The moral mission of education must be translated into binding requirements across curricular objectives, instructional implementation, and quality evaluation. Whether applied in algorithmic recommendation, scenario generation, or learning analytics, all technological uses must ultimately serve the interpretation of Marxist positions, viewpoints, and methodologies, and the cultivation of core socialist values—preventing formal innovation from displacing intellectual deepening. To achieve this, curriculum standards, teaching guidelines, and assessment criteria should explicitly define hierarchical indicators and evidentiary forms for value-oriented goals, ensuring that technological applications remain interpretable, auditable, and accountable. Such a system safeguards against the deviation of “technological prosperity and ideological hollowing,” preserving the essential purpose of IP education—to integrate technological progress with the enduring mission of moral and ideological formation.

5.2. Human–Machine Collaborative Education Mechanisms

At the institutional level, AI should function as an amplifier of teachers' professionalism rather than a substitute for it. The design of collaborative processes and role allocations must revolve around the interactive chain linking teachers, students, and intelligent systems. Supported by university-based "AI + Ideological and Political Education" experimental platforms, a closed-loop mechanism can be established covering lesson preparation, classroom teaching, assessment, and feedback. Within this structure, teachers lead topic selection and value interpretation; intelligent systems manage data processing, resource integration, and personalized recommendations; and students achieve active growth through task-based learning and peer evaluation. By clearly defining procedural standards and quality thresholds, such a mechanism both harnesses the efficiency dividends of technology and reinforces the teacher's irreplaceable role in meaning production and value leadership. Ultimately, it aligns efficiency enhancement with the moral mission of education, enabling human–machine synergy to advance both pedagogical innovation and ideological integrity.

5.3. Co-construction and Sharing of Digital Resource Repositories

The high-quality delivery of IP education depends on the creation of an authoritative, systematic, and dynamically updatable resource ecosystem. A three-tier "Digital Ideological and Political Education" repository—at the national, provincial, and inter-university levels—should be developed through graded co-construction and cross-domain sharing to prevent redundant development and resource fragmentation. Resource inclusion must follow the principles of political reliability, theoretical rigor, and data verifiability, supported by standardized metadata annotation, version control, and periodic review mechanisms. These measures ensure that textual, data-based, and multimodal materials maintain consistency in ideological orientation, academic integrity, and normative compliance. Through open licensing and usage evaluation, high-quality cases and practice-based materials can circulate precisely across different courses and teaching units, supporting continuous iteration under the pedagogical model of "shared content, differentiated design." This framework promotes the ongoing renewal of course content while ensuring that all resources collectively reinforce the intellectual depth, practical relevance, and ideological coherence of IP education.

5.4. Systematic Enhancement of Teachers' Digital Literacy

Teachers remain the decisive factor in determining whether AI can be effectively integrated into IP education. Capacity building should be implemented through regular training programs, interdisciplinary learning communities, and context-based workshops, forming a progressive development pathway comprising three stages: tool proficiency, collaborative innovation, and curriculum reconstruction. Digital literacy, ethical awareness, and data governance competence should be incorporated as core indicators in faculty recruitment, promotion, and performance appraisal. Training content must extend beyond technical application to strengthen understanding of algorithmic bias detection, evidence-based reasoning, and the boundaries of learning analytics—preventing two extremes: "technology available but unused" and "technology convenient but misused." Only when technological empowerment consistently serves value

guidance and competency development can AI integration genuinely advance the educational mission of moral cultivation and ideological enrichment.

5.5. Improvement of Institutional Norms and Compliance Safeguards

The integration of AI into education inevitably introduces challenges related to data security, privacy protection, and ethical governance. Policies and regulations should clearly define the scope of data collection, storage methods, and purposes of use, strictly enforcing principles such as data minimization, purpose limitation, informed consent, de-identification, and lifecycle management. A cross-departmental mechanism for supervision, risk assessment, and accountability tracing should be established to achieve comprehensive, element-wide, and scenario-based compliance oversight. At the same time, the principles of interpretability, traceability, and accountability must serve as baseline requirements for educational platforms and course quality assurance systems. These safeguards prevent the instrumentalization of evaluation and data utilitarianism, ensuring that technological applications remain consistent with both educational principles and political requirements. Within such a governance framework, the vitality of IP education can develop steadily and sustainably, maintaining its moral and intellectual integrity amid the rapid evolution of artificial intelligence.

6. Conclusions

The widespread adoption of artificial intelligence (AI) signifies the transition of education from digitalization to intelligentization. Its deep integration not only reshapes knowledge delivery and learning methods, but also introduces new imperatives for educational governance and value formation. As a core course dedicated to cultivating virtue and shaping character, ideological and political (IP) education serves both as a carrier of this transformation and a benchmark for evaluating its effectiveness. AI brings not only methodological and instrumental innovation but, more profoundly, drives a reconstruction of educational logic. The central challenge for IP education in the new era lies in integrating technological advantages while preserving a firm value orientation.

From a holistic perspective, the AI-enabled reconstruction of IP education unfolds across three interrelated dimensions. Cognitively, it promotes a transition from indoctrination and memorization to problem-driven inquiry and evidence-based reasoning, thereby strengthening the integration of knowledge transmission and value generation. Relationally, it transforms teachers from knowledge mediators into interpreters of value and constructors of meaning, reaffirming their irreplaceable professionalism within a human–machine collaborative framework. Institutionally, it calls for the establishment of a systemic architecture encompassing value leadership, resource co-construction, data governance, and compliance regulation, ensuring that technological applications consistently serve the moral mission of education rather than diverge from it.

Therefore, artificial intelligence does not diminish ideological and political education. Instead, through the productive tension it introduces, AI compels conceptual renewal and structural optimization. Only through the synergistic advancement of theoretical self-awareness, practical

innovation, and institutional safeguards can IP education sustain its vitality in the intelligent era and continue to fulfill its strategic mission of nurturing minds and shaping values.

Author Contributions:

Conceptualization, Y.W.; methodology, Y.W.; software, Y.W.; validation, Y.W.; formal analysis, Y.W.; investigation, Y.W.; resources, Y.W.; data curation, Y.W.; writing—original draft preparation, Y.W.; writing—review and editing, Y.W.; visualization, Y.W.; supervision, Y.W.; project administration, Y.W.; All authors have read and agreed to the published version of the manuscript.

Funding:

Not applicable.

Institutional Review Board Statement:

Not applicable.

Informed Consent Statement:

Not applicable.

Data Availability Statement:

Not applicable.

Conflict of Interest:

The authors declare no conflict of interest.

References

Baker, R. S., Martin, T., & Rossi, L. M. (2016). Educational data mining and learning analytics. The Wiley handbook of cognition and assessment: Frameworks, methodologies, and applications, 379-396.

Chi, M. T. H., & Wylie, R. (2014). The ICAP framework: Linking cognitive engagement to learning outcomes. Educational Psychologist, 49(4), 219–243.

Clark, R. C., & Mayer, R. E. (2016). E-Learning and the Science of Instruction (4th ed.).

Dede, C. (2009). Immersive interfaces for engagement and learning. Science, 323(5910), 66–69.

Holmes, W., Bialik, M., Fadel, C. (2019). Artificial Intelligence in Education Promises and Implications for Teaching and Learning. (1st ed.). Center for Curriculum Redesign: Boston, MA, USA.

Jia, X. (2023). Constructing the knowledge system of college ideological and political courses from a holistic perspective. Party Building and Ideological Education in Schools.

Koedinger, K. R., Corbett, A. T., & Perfetti, C. (2012/2015). The knowledge-learning-instruction framework and cognitive tutors. Cognitive Science, 36 (2012), 757–798.

Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). Intelligence Unleashed: An Argument for AI in Education. UCL Knowledge Lab: London, UK

Wang, J. (2023). Generation, risks, and countermeasures of AI empowerment in college ideological and political courses. Jiangsu Higher Education, 2023(9), 77-83.

Yan, J., & Gao, C. (2023). AI-driven transformation of teaching paradigms in college ideological and political courses. Lingnan Journal, 37(2), 101-110.

Zhang, J. (2023). Educational reflections on ChatGPT: Ethical limits and challenges. E-Education Research, 44(9), 13-20.

Zhang, X., & Huang, Y. (2022). Challenges and countermeasures of AI empowerment in IP courses. Journal of Suzhou University of Science and Technology (Social Science), 39(2), 62-68.

Zhang, Y., Wang, M., Rong, L., et al. (2024). Can ChatGPT serve as an emotional expert? Journal of Peking University (Natural Science).

Zhao, J., & Liu, Y. (2022). On the deep integration of AI and IP courses. Journal of Guangdong University of Education, 42(3), 45-50.