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# Practical Dilemma and Path Optimization of Digital Transformation of Ideological and Political Courses in Colleges and Universities

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**Abstract:** With the rapid advancement of information technology, the digital transformation of ideological and political education courses in higher education institutions has become an inevitable trend. This paper conducts an in-depth analysis of practical challenges encountered during this digital transition, including uneven quality of digital teaching resources, insufficient digital pedagogical competencies among faculty, low student engagement, and an underdeveloped evaluation system. By combining theoretical exploration with empirical research, the paper proposes optimization strategies for advancing digital transformation in ideological education courses. These include enhancing the development of digital teaching resources, strengthening professional training for educators, stimulating student participation, and refining assessment mechanisms. The aim is to elevate the quality of ideological education while achieving modernization in political education practices.

**Keywords:** ideological and political courses in colleges and universities; digital transformation; practical difficulties; path optimization

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## 1. Introduction

In today's digital age, the widespread application of information technology has profoundly transformed the landscape and models of education. As a key course for implementing the fundamental mission of cultivating virtue and nurturing talent, ideological and political education in higher education institutions holds significant practical implications for digital transformation. Digital transformation not only enriches teaching content and formats while enhancing instructional efficiency, but also better meets students' diverse learning needs, thereby boosting the appeal and impact of ideological and political courses. However, in practice, the digital transformation of ideological and political education in universities faces numerous challenges that require in-depth research and the identification of effective solutions.

## 2. Practical Difficulties in the Digital Transformation of Ideological and Political Courses in Colleges and Universities

### 2.1. The Quality of Digital Teaching Resources Is Uneven

While digital teaching resources for ideological and political education have seen explosive growth in quantity, structural tensions persist between content supply and educational effectiveness. Some materials lag behind the pace of knowledge updates in response to evolving social realities and ideological trends, failing to address the cognitive tensions and spiritual dilemmas young learners face during value formation. Resource development often lacks disciplinary logic and educational objectives in its top-level design, resulting in fragmented and homogeneous content that fails to adapt to different

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learning stages or professional backgrounds [1]. The absence of unified technical standards and data interfaces creates information silos across platforms, making resource integration challenging. This forces teachers to repeatedly screen content and adapt technologies, inadvertently increasing their workload. More fundamentally, resource development focuses on digitizing content while neglecting the organic integration of interactive elements, contextual embedding, and cognitive guidance. This results in learning processes lacking immersion and critical thinking tension, failing to ignite students' intrinsic motivation or value resonance. The mismatch between crude supply-side expansion and refined demand-side requirements ultimately hinders the effective realization of digital resources' educational potential in ideological education [2].

While digital teaching resources for ideological and political education have grown rapidly, gaps remain between content supply and actual teaching effectiveness. Some materials are outdated and do not fully meet students' learning needs. The lack of unified standards and interactive elements also makes resource integration difficult, increasing teachers' workload and limiting students' engagement.

### *2.2. Teachers' Digital Teaching Ability Is Insufficient*

As key practitioners in ideological education, college political theory instructors face profound challenges in capability restructuring during digital transformation. While some teachers possess basic IT skills, their instructional design has yet to evolve from "tool application" to "pedagogical reconstruction." Technical integration remains superficial, failing to embed the intrinsic logic of cognitive guidance and value cultivation. Their teaching practices remain entrenched in lecture-centered approaches, inadequately addressing learners' interactive needs, cognitive rhythms, and emotional feedback in digital environments—creating structural disconnections between instructional delivery and students' meaning-making [3]. Meanwhile, many instructors demonstrate limited understanding of emerging pedagogical models like data-driven instruction, multimodal resource integration, and virtual scenario construction, struggling to reconcile the political rigor and academic depth required for ideological education through technological means. Institutional support at universities also falls short: training programs prioritize short-term technical drills over deepening educational philosophies and reflective practice, lacking sustainable professional development mechanisms. Teachers navigating technological adaptation face a tension between instrumental rationality and educational values—struggling to manage platform complexities while maintaining systematic ideological guidance in fragmented information environments. This dual pressure significantly hampers substantial improvement in their digital teaching competencies [4].

College instructors face challenges adapting to digital teaching, as many still rely on lecture-centered methods and basic IT skills. They often lack experience with modern digital pedagogy, which limits student engagement and interactive learning. Institutional support for developing these skills is also insufficient.

### *2.3. Low Student Engagement*

In the digital educational ecosystem, the superficial engagement of students reveals deeper obstacles to enhancing the effectiveness of ideological and political education. While technological tools expand the temporal and spatial boundaries of knowledge transmission, learners' cognitive investment and emotional involvement have not progressed in tandem. Some students still view the value of ideological courses as instrumental rationality, reducing learning processes to mere credit-seeking tasks with insufficient intrinsic motivation [5]. The dual pressures of information overload and attention fragmentation in digital media further exacerbate cognitive burnout in theoretical learning, manifested through disengagement from abstract and systematic content. In extracurricular self-directed learning, students often fall into passive browsing and mechanical clicking patterns, lacking the willingness and ability for deep reading or critical reflection.

Weakened interaction mechanisms in platform designs hinder the formation of dialogic teaching relationships, diluting emotional connections and intellectual resonance between teachers and students in virtual spaces. Peer collaboration and inquiry also become superficial without proper guidance [6]. Delayed feedback and monotonous evaluations further diminish students' sustained participation motivation, gradually pushing them into a "visible yet absent" liminal state during digital learning. This inefficiency not only restricts the educational potential of digital resources but also weakens the immersive effects of ideological education.

Students' engagement in digital ideological courses is often superficial. Many focus on credit-seeking rather than meaningful learning, and online distractions reduce attention and motivation. Limited platform interaction and delayed feedback further weaken engagement [7].

#### *2.4. The Teaching Evaluation System Is Not Perfect*

The current evaluation framework for ideological and political education in Chinese universities remains entrenched in a traditional "end-of-the-term" paradigm, over-reliant on standardized written tests as the primary measure of learning outcomes. This approach severely neglects the process-oriented observation of students' cognitive evolution, value internalization, and deep engagement with digital media. In the context of digital education, this evaluation logic increasingly reveals structural limitations, failing to effectively capture students' authentic mental transitions, emotional investments, and collaborative interactions in virtual learning environments. Non-linear learning outcomes such as online learning trajectories, discussion participation quality, depth of independent inquiry, and multimodal assignment presentations are often marginalized due to the absence of scientific quantitative-qualitative integration mechanisms. This results in teaching feedback becoming unidirectional and sluggish. The narrowing of evaluation dimensions not only weakens the motivational function of the learning process but also invisibly stifles teachers' innovative drive to redesign instructional designs, reducing digital technology to merely a content delivery tool rather than embedding it into the core structure of teaching evaluation. The rigidity of the evaluation system further leads to utilitarian tendencies in teaching and learning behaviors, where students view learning as a technical operation for score acquisition while neglecting the value reflection and subject construction significance inherent in ideological education. To achieve profound breakthroughs in digital transformation, we must shift the evaluation paradigm from "result-oriented" to "development-oriented," establishing a multidimensional dynamic assessment model that encompasses cognitive progress, emotional experiences, and behavioral practices. Only then can evaluation truly become an intrinsic mechanism driving educational symbiosis and value guidance.

The evaluation system for ideological courses relies heavily on end-of-term exams, ignoring students' learning processes and engagement. Important aspects like participation, discussion, and independent inquiry are often overlooked, which limits motivation and teaching innovation. A more development-oriented, multidimensional assessment is needed.

### **3. Path Optimization of Digital Transformation of Ideological and Political Courses in Colleges and Universities**

#### *3.1. Improve the Level of Digital Teaching Resource Construction*

The systematic development of digital teaching resources for ideological and political education in higher education urgently requires breaking free from fragmented, superficial, and homogeneous development patterns. We must shift toward an integrated approach guided by pedagogical logic and supported by technological empowerment. By leveraging subject-specific knowledge graphs, we should establish a comprehensive re-

source system encompassing theoretical interpretation, value guidance, and practical responses. Professional teams should collaborate to transform teaching content through innovative forms and expressions. High-quality instructional videos need to transcend simple lecture formats by incorporating scenario reenactments, problem-driven chains, and multimodal presentations to enhance the vividness and emotional resonance of theoretical explanations. Digital textbooks should overcome linear text limitations by embedding interactive knowledge nodes and dynamic update mechanisms, ensuring content iteration aligns with students' cognitive rhythms. Case studies must be grounded in contemporary contexts, integrating social trend analysis and real-world problem-solving to strengthen the space for value judgment deliberation. Building a tiered, scalable resource-sharing framework is essential, creating closed-loop processes for content generation, review, aggregation, and utilization. This facilitates the fluid restructuring and creative transformation of quality materials in teaching practices, forming a knowledge ecosystem that supports pedagogical innovation. Resource development should not merely focus on technological updates but evolve into a structural force driving the deepening of educational philosophies and the transformation of talent cultivation models.

Developing digital teaching resources should focus on integration rather than fragmented growth. High-quality videos, interactive textbooks, and contemporary case studies can make learning more engaging and aligned with students' understanding. A structured sharing framework also helps teachers access and apply resources more efficiently.

### *3.2. Strengthen the Training of Teachers' Digital Teaching Ability*

The cultivation of teachers' digital teaching capabilities requires integration into a systematic development framework. Grounded in the complexity of educational practice and the underlying logic of value transmission, we should establish an advanced mechanism that combines knowledge renewal, skill drills, and reflective practice. Training content must transcend technical tool operations, focusing on reconstructing instructional design capabilities in digital contexts. This approach strengthens teachers' theoretical understanding and situational response strategies regarding data-driven teaching decisions, multimodal resource integration, and virtual space teacher-student interactions. Through workshop-style professional development, immersive teaching simulations, and interdisciplinary collaborative communities, educators can achieve seamless integration of technological logic and pedagogical principles within authentic teaching scenarios. The technical support system should demonstrate continuity and sustainability, forming comprehensive auxiliary mechanisms from pre-class resource preparation and in-class dynamic adjustments to post-class learning analysis. Incentive mechanisms should reflect tiered professional growth, incorporating digital teaching commitment and innovative teaching capabilities into faculty evaluations, quality assessments, and academic advancement pathways. This motivates teachers to transition from passive adaptation to proactive exploration. In this process, teachers evolve beyond being mere technology users to becoming co-creators of digital educational ecosystems and practical pioneers in transforming ideological communication paradigms. Through this dual interaction of capability enhancement and role transformation, we ultimately achieve deep alignment between the subjectivity and contemporary relevance of ideological and political education.

Teachers' digital abilities should be developed through systematic training that combines technical skills and instructional design. Workshops, simulations, and collaborative communities help educators apply technology effectively while improving pedagogy. Incentives and professional support encourage teachers to actively explore new teaching methods.

### *3.3. Stimulate Students' Enthusiasm for Participation*

In the digital pedagogical environment of ideological and political education, students' deep engagement is fundamentally shaped by instructional design that simultaneously constructs cognitive tension and value resonance. Educators should embed contextualized teaching strategies to transform abstract theories into perceptible, dialogic, and reflective knowledge spaces, enabling students to transition from passive reception to active construction within the interactive logic of digital media. By leveraging data feedback mechanisms in intelligent learning platforms, educators can dynamically track cognitive pathways and emotional responses, precisely adjusting teaching pacing and content presentation to enhance immersion and responsiveness. The integration of virtual simulation environments not only expands the spatiotemporal boundaries of ideological education but also reconstructs knowledge transmission contexts through multimodal symbolic systems, fostering value recognition through embodied experiences. Simultaneously, interactive mechanisms should transcend superficial Q&A to evolve into topic-driven collaborative inquiry models, promoting critical thinking and social responsibility awareness through perspective exchange and meaning negotiation. Equally crucial is the cultivation of emotional connections during instruction. Educators should harness the expressive advantages of digital media to create humanistic online learning communities, enhancing students' sense of belonging and engagement through mutual respect, empathy, and sustained dialogue. This participation transcends mere technical responsiveness—it represents deep learning practice shaped by the tripartite interaction of technology, cognition, and values, fundamentally aiming to reshape and elevate intersubjective relationships in ideological education within the digital era.

Students' participation improves when instruction combines clear guidance with interactive activities. Virtual simulations, collaborative projects, and real-time feedback help students engage actively and develop critical thinking. Emotional connections and supportive online communities further increase motivation and engagement.

### *3.4. Improve the Teaching Evaluation System*

The restructuring of ideological and political education evaluation systems in higher education urgently requires moving beyond the traditional single paradigm dominated by summative assessments, shifting toward a multidimensional linkage mechanism that integrates process-oriented, developmental, and technical dimensions. In digital teaching environments, students' learning trajectories exhibit characteristics of non-linearity, interactivity, and data traceability, providing practical foundations for building dynamic and precise evaluation models. By collecting multimodal behavioral data such as cognitive engagement, interaction frequency, explicit thinking, and collaborative performance on digital platforms, we can achieve comprehensive profiling of learning depth and value internalization. Evaluation dimensions should encompass knowledge mastery, cognitive evolution, emotional identification, and practical orientation, emphasizing qualitative analysis over quantitative statistics. Introducing self-evaluation and peer review mechanisms not only expands diverse participation pathways but also stimulates the awakening of subject consciousness and autonomous construction of moral judgment through reflective dialogues. Feedback on evaluation results should embody educational functions, forming a closed-loop system of "data-driven-diagnostic improvement-value guidance," making evaluation an intrinsic driving force for the continuous development of students' ideological-political literacy. Under this framework, teaching evaluation ceases to be the endpoint of learning but becomes a crucial intermediary in value construction, carrying threefold implications of guidance, motivation, and education.

Teaching evaluation should go beyond exams and include ongoing assessment of participation, collaboration, and understanding. Self-evaluation, peer review, and data tracking help provide feedback and guide students' cognitive, emotional, and practical development, making evaluation an active part of learning.

#### 4. Conclusions

The digital transformation of ideological and political education in higher institutions has transcended mere technological integration, evolving into a pivotal practice for reshaping educational ecosystems. In smart classrooms, educators utilize data dashboards to monitor students' cognitive fluctuations in real-time, sparking intellectual exchanges through interactive bulletin board discussions and virtual seminars. This approach shifts knowledge transmission to value-based resonance. Digital resources now extend beyond mere courseware accumulation, employing immersive virtual scenarios to reconstruct historical contexts, thereby materializing theories through experiential learning. Teachers transition from lecturers to facilitators, algorithmically identifying students' cognitive challenges and providing tailored guidance. Through multimodal learning experiences, students demonstrate cognitive trajectories, enabling evaluation systems to track subtle shifts in emotional tendencies and value orientations, thus establishing a chain of knowledge-to-belief-to-action progression. This transformation represents not merely pedagogical innovation but a profound paradigm shift toward intersubjective education, driving the modernization of ideological and political education through technological empowerment.

The digital transformation of ideological and political education in higher institutions not only integrates advanced technology but also fundamentally reshapes teaching and learning dynamics, fostering more interactive and personalized educational experiences. In smart classrooms, educators utilize real-time data dashboards to monitor students' cognitive fluctuations and learning patterns, sparking rich intellectual exchanges through interactive bulletin board discussions, virtual seminars, and collaborative projects. Digital resources now extend beyond simple courseware accumulation, employing immersive virtual simulations, scenario reenactments, and historical reconstructions to materialize theories and connect abstract concepts to real-world applications. Teachers shift from traditional lecturers to facilitators and mentors, using algorithms to identify cognitive challenges, adapt instructional pacing, and provide tailored guidance that addresses both individual and group learning needs. Multimodal learning experiences enable students to demonstrate evolving cognitive trajectories and emotional responses, while evaluation systems track subtle shifts in value orientations and reflective thinking, establishing a clear chain of knowledge-to-belief-to-action progression. Furthermore, students are encouraged to engage in peer-to-peer discussion, critical reflection, and project-based exploration, enhancing both analytical skills and moral judgment. This comprehensive approach strengthens cognitive, emotional, and ethical engagement, creating a more inclusive and participatory learning environment. Overall, the digital transformation represents not just pedagogical innovation but a deep paradigm shift toward intersubjective education, driving the modernization, effectiveness, and societal relevance of ideological and political education through technological empowerment.

#### References

1. D. Gao, and J. Cai, "Challenges and strategies for universities students' ideological and political education in the digital economy era," *Journal of Modern Education and Culture*, vol. 1, no. 4, 2024, doi: 10.70767/jmec.v1i4.501.
2. K. Hasa, "Examining the OECD's perspective on AI in education policy: a critical analysis of language and structure in the 'AI and the future of skills'(AIFS) document and its implications for the higher education (Doctoral dissertation, University of British Columbia)," 2023.
3. N. Baigabylov, K. Mukhambetova, K. Baigusheva, O. Shebalina, M. Kudabekov, and A. Akpanov, "Identifying risks in the digital transformation of higher education," *Journal of Turkish Science Education*, vol. 22, no. 1, pp. 147-172, 2025, doi: 10.36681/tused.2025.009.
4. P. Liu, "Opportunities and challenges of the ideological and political education for college students in new era," in *Proc. 2015 Int. Conf. Econ., Manag., Law Educ.*, Atlantis Press, 2015, doi: 10.2991/emle-15.2015.113.
5. J. Liang, and H. Zheng, "The Challenges and Countermeasures of Ideological and Political Education Theory Course Teaching for Art Students in Universities in the New Media Era," *Journal of Education and Educational Technologies*, vol. 3, no. 11, pp. 11-16, 2023, doi: 10.53469/jeet.2023.03(11).03.

6. G. Zheng, "Construction of ideological and political education in universities based on intelligent digital education," *Advances in Educational Technology and Psychology*, vol. 8, no. 1, pp. 45-54, 2024, doi: 10.23977/aetp.2024.080106.
7. Y. Fu, "Research on Integrating Ideological and Political Education into College English Course Under the Background of Teaching Digital Transformation," *The Educational Review, USA*, vol. 9, no. 3, 2025, doi: 10.26855/er.2025.03.010.

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