

# The Value, Practical Problems and Optimization Path of Digital Technology in Ideological and Political Education in Colleges and Universities

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## Abstract

In the context of the global digital revolution, the digital transformation of ideological and political education in higher education institutions has become an inevitable trend. Grounded in the Marxist theory of human comprehensive development, this paper systematically elucidates four core values that digital technology can empower in ideological and political education: the fundamental orientation of moral cultivation, the goal of human free and comprehensive development, the guidance of socialist core values, and the principle of technology-humanity symbiosis. By analyzing practical issues such as value confusion, subject alienation, and institutional lag in current practices, the study proposes an optimized three-dimensional collaborative path of “value guidance—capacity building—technological support,” aiming to provide theoretical references and practical guidance for the innovative development of digital ideological and political education in higher education institutions.

## Keywords

digital technology; ideological and political education in higher education; value orientation; educational mechanism; digital transformation

**Online publication:** July 26, 2025

## 1. Introduction

The iterative evolution and deep penetration of information technology have facilitated the profound integration of digital technologies into education, injecting unprecedented transformative momentum and development opportunities into ideological and political education in higher education institutions<sup>[1]</sup>. As the core source and key domain for theoretical construction and practical exploration of digital ideological-political education, universities leverage digital platforms like

online education systems and virtual reality technologies to effectively expand the coverage dimensions of ideological-political education and innovate the presentation forms of educational content, thereby significantly enhancing educational effectiveness<sup>[2]</sup>. However, the digital transformation of ideological-political education in universities is not merely a technical innovation; its essence lies in systematically reshaping educational philosophies and driving profound transformations in pedagogical models—a

deep integration of technological logic and educational logic<sup>[3]</sup>. Theoretically, Marxist classics explicitly state: “Human nature is not an abstract quality inherent in any single individual; in reality, it is the sum total of all social relations.” The virtual social relationship networks constructed by digital technologies are gradually becoming new arenas where human essential capabilities can be manifested<sup>[4]</sup>, tested, and validated. This theoretical perspective provides crucial academic support for the integrated development of digital technologies and ideological-political education in higher education. In this context, systematically exploring the value orientation, practical challenges, and optimization paths of digital technology’s empowerment in ideological-political education not only enriches the theoretical research system in this field but also offers actionable guidance for addressing practical difficulties in the digital transformation of ideological-political education and promoting high-quality development in this domain, carrying significant theoretical and practical value.

## **2. The value and compliance of digital technology in empowering ideological and political education in colleges and universities**

Value adherence refers to the systematic framework of core value concepts that guides behavioral orientation and practical direction in specific fields of practice. As a specialized domain where technological tools are deeply integrated with educational objectives, digital technology empowerment in ideological and political education at universities must first establish scientific value benchmarks<sup>[5]</sup>. These benchmarks serve dual purposes: they act as “scales” defining the boundaries of digital technology applications, while functioning as “guiding stars” ensuring technology consistently serves educational missions and stays true to the fundamental principles of ideological and political education.

### **2.1. The fundamental orientation of cultivating virtue and fostering talents**

The fundamental mission of ideological and political education in higher education institutions is to cultivate virtue and nurture talents, with digital technology

applications serving this core objective<sup>[6]</sup>. President Xi Jinping emphasized, “What kind of people we educate is the primary concern of education.” As an educational tool, the value realization of digital technology depends on its alignment with the requirements of moral cultivation. The School of Marxism at Xiangtan University has established a “digital technology + revolutionary resources + practical education” model, transforming historical materials into digital ideological-political resources<sup>[7]</sup>. Through virtual simulation courses, students gain immersive experiences to comprehend revolutionary spirit, achieving the integration of value guidance and knowledge transmission. This practice demonstrates that digital technology must anchor itself in the fundamental mission of moral cultivation to avoid becoming mere technical displays, thereby truly fulfilling its educational function<sup>[8]</sup>.

### **2.2. The goal of the free and all-round development of human beings**

Marxist theory on the all-round development of human beings emphasizes that human progress should be “free and comprehensive.” Digital technology now offers new possibilities to achieve this goal. In traditional ideological education models, students often remain passive recipients of knowledge. However, digital technologies create personalized learning environments that enable students to “freely and autonomously achieve self-creation.” Virtual simulation courses like “Qia Tongxue Shaonian” (The Time of Youth) developed by Xiangtan University allow students to independently select learning content and paths. Through interactive exploration, these courses cultivate critical thinking and innovative capabilities. This autonomous learning model embodies the Marxist principle of “free development,” creating vast opportunities for students’ individual growth<sup>[9]</sup>.

### **2.3. Guided by core socialist values**

Digital technology in ideological and political education must uphold the guiding role of socialist core values to ensure proper political orientation. In today’s information-rich digital landscape, such education faces challenges in value guidance. A red-themed Party history short video produced by Xiangtan University has garnered over 100 million views, blending mainstream values into digital

content through youthful storytelling that achieves subtle yet profound educational impact. This demonstrates that digital technology applications should integrate socialist core values throughout content creation, platform development, and interactive design processes, thereby establishing a cohesive and influential digital value dissemination system<sup>[10]</sup>.

#### **2.4. The principle of symbiosis between technology and humanity**

The integration of technological application and humanistic care constitutes a vital value principle in digital ideological education. Marxist philosophy maintains that technological development should serve human liberation rather than alienation. When leveraging digital technologies to enhance ideological education, we must avoid overreliance on technical solutions while consistently preserving emotional connections with learners. The virtual exhibition hall developed by Xiangtan University exemplifies this approach through its combination of advanced 3D modeling techniques and meticulous presentation of historical details. This innovative model allows students to experience the allure of technology while gaining spiritual nourishment. Such a symbiotic relationship between technology and humanities demonstrates the dialectical unity of instrumental rationality and value rationality, representing an essential requirement for the healthy development of digital ideological education<sup>[11]</sup>.

### **3. Practical problems of digital technology enabling ideological and political education in colleges and universities**

While digital technology has been widely adopted in ideological and political education at universities, effectively expanding educational platforms and domains, its pedagogical effectiveness still faces multiple practical barriers during implementation. To fully unlock the potential of digital ideological education in higher institutions and achieve deep-rooted educational outcomes, it is crucial to systematically analyze core challenges in current practices—including value orientation confusion, role distortion among

educators, and delayed operational mechanisms. These issues have become critical priorities requiring urgent resolution in advancing digital ideological education, and are key factors that must be addressed to ensure deep integration between technological innovation and political education<sup>[12]</sup>.

#### **3.1. Value loss: the tendency of technology to be instrumentalized is obvious**

Some universities exhibit a tendency to prioritize technological aspects over value-oriented principles in digital ideological education, resulting in weakened value guidance functions. Many educators solely utilize technology for knowledge dissemination while neglecting the design of value-oriented instruction. Some online courses merely accumulate digital resources without deeply integrating socialist core values; virtual simulation teaching risks fostering historical nihilism, revealing deficiencies in value verification mechanisms. This instrumentalization of technology reduces ideological education to mere technical demonstrations, deviating from its fundamental mission of cultivating virtue and nurturing talent<sup>[13]</sup>.

#### **3.2. Subjective alienation: the subjectivity of teachers and students is dissolved**

The improper application of digital technologies undermines the autonomy of teachers and students, conflicting with the goal of holistic human development. On one hand, educators' 'inadequate digital literacy hinders their leadership role, as only a minority possess strong capabilities in digital instructional design, making it difficult to effectively guide students' value formation. On the other hand, students often face selection dilemmas when navigating vast digital resources, while algorithm-driven homogenized content limits their intellectual horizons, weakening their learning agency. Traditional teaching's emotional interaction gets blocked by digital interfaces, reducing meaningful spiritual dialogue between teachers and students, which impedes the effective transmission of values<sup>[14]</sup>.

#### **3.3. Lagging mechanism: the support system is not sound enough**

The long-term mechanisms for digital ideological

education remain underdeveloped, with technological applications lacking institutional safeguards. Resource development suffers from redundant development and fragmentation, resulting in low sharing rates of digital resources. For instance, although Xiangtan University has established rich virtual exhibition halls, there's insufficient cross-institutional sharing mechanisms. Evaluation systems still rely on traditional standards, failing to scientifically assess the value cultivation process in digital environments. Security management faces growing risks of data breaches and harmful content infiltration, urgently requiring robust regulatory frameworks. These systemic barriers hinder the full realization of digital technology's educational potential<sup>[15]</sup>.

#### **4. The optimization path of digital technology enabling ideological and political education in colleges and universities**

In the face of significant development opportunities and challenges brought by digital technology, higher education institutions' digital ideological and political education must accelerate high-quality development with heightened responsibility and proactive commitment. This should be grounded in fulfilling the fundamental mission of cultivating virtue and nurturing talent, addressing practical needs in frontline work, and ensuring effective educational outcomes. To achieve this, institutions should establish systematic optimization pathways based on value principles, thereby promoting deep integration between digital technology and ideological-political education.

##### **4.1. Strengthen the mechanism of value guidance and consolidate the ideological foundation**

To establish a value-driven digital ideological education framework, we must ensure technological applications remain aligned with educational objectives. First, develop a value verification system for digital resources by forming expert review panels comprising political education specialists and technical experts to conduct political vetting of virtual simulation courses and ideological education short videos. For instance, Xiangtan

University implements a "dual-review" mechanism for digitized revolutionary heritage materials. Second, innovate value dissemination methods by integrating socialist core values into digital narratives, utilizing interactive features like chat interactions and virtual character dialogues to enhance the appeal of value guidance. Third, refine evaluation standards for digital ideological education by establishing a three-dimensional assessment model (content-process-effectiveness) with value leadership effectiveness as the core metric.

##### **4.2. Improve the level of subject empowerment and promote all-round development**

Capacity-building initiatives enhance the initiative of teachers and students in digital ideological education. On one hand, implementing a teacher digital literacy enhancement program through "theory + practice" training focuses on improving digital instructional design and value guidance capabilities, aiming to increase the proportion of teachers with strong design competencies. On the other hand, cultivating students' digital learning abilities involves offering digital media literacy courses that guide them to critically utilize digital resources and achieve holistic development through self-directed learning. The practice of Xiangtan University's "student-created, self-compiled, self-presented" ideological education works has effectively stimulated student initiative, making it worthy of promotion.

##### **4.3. Improve the technical support system to ensure benign operation**

Establish a collaborative and efficient digital ideological education support mechanism. In resource development, create regional alliance networks by integrating revolutionary cultural resources to build cross-institutional virtual practice platforms. For technological applications, develop intelligent teaching systems that combine educational value with interactive features, enabling personalized learning recommendations and value guidance. In terms of security management, implement blockchain technology to ensure data integrity while establishing real-time monitoring mechanisms for inappropriate content. Simultaneously, increase investment in ideological education informatization, prioritizing value-driven digital projects to establish a

sustainable support system.

## 5. Conclusion

Empowering ideological and political education in higher education institutions through digital technology is an essential pathway to modernizing talent cultivation, which must adhere to correct value principles. The four guiding principles proposed in this paper—cultivating virtue and nurturing talents, promoting holistic human development, leading with socialist core values, and fostering symbiosis between technology and humanities—form the value framework for digital ideological education. Current issues such as value confusion, subject alienation, and institutional

lag fundamentally stem from the disconnect between theoretical principles and practical implementation. By establishing a three-dimensional optimization path of “value guidance, capacity building, and technological support,” we can achieve deep integration between digital technology and ideological education. Future research could further explore new mechanisms for value guidance in the AI era and the application boundaries of emerging technologies like the metaverse in ideological education. Only by consistently prioritizing student-centered approaches and organically integrating technological progress with human development can we fully leverage the educational potential of digital technology, cultivating a new generation capable of shouldering the great mission of national rejuvenation.

### Disclosure statement

The author declares no conflict of interest.

## References

- [1] Li J, 2024, Empowering the Integration of Digital Technology in Computer Course Ideological and Political Education. *Journal of Science Education*, (36):104-106.
- [2] Liu Y, 2024, Applying Digital Technology to Innovate Online Ideological and Political Education in Universities. *Heilongjiang Daily*, (006).
- [3] Feng X, Shao E, 2024, Preliminary Discussion on Digital Technology Empowering Ideological and Political Course Teaching in Vocational Colleges. *School Party Building and Ideological Education*, (24):55-58.
- [4] Chen L, Wang C, 2024, Three Dimensions of Digital Technology Empowering Ideological and Political Course Teaching. *Fujian Education*, (52):47-52.
- [5] Gao J, 2024, Deep Logic and Practical Paths of Digital Technology Empowering Higher Education Ideological and Political Course Teaching. *Journal of Fujian Business University*, (06):87-94.
- [6] Chang J, 2024, Integrating Digital Technology into Ideological and Political Education: Realistic Challenges and Implementation Paths. *Journal of Huainan Vocational and Technical College*, (06):25-27.
- [7] Li X, Wei T, 2024, Pathways for Digital Technology Empowering Ideological and Political Education in Higher Education Institutions. *Journal of Yan'an Vocational and Technical College*, (06):7-12.
- [8] Chen Z, 2024, Exploring Pathways for Digital Technology Empowering Precise Ideological and Political Education in Higher Education Institutions. *Century Bridge*, (22):73-75.
- [9] He X, Guan T, 2024, Reflections on Innovation in Digital Technology Empowering Ideological and Political Course Platforms in Higher Education Institutions. *School Party Building and Ideological Education*, (22):53-56.
- [10] Zou S, Li S, 2024, Realistic Challenges and Optimization Paths of Digital Technology Empowering Ideological and Political Education in Universities. *Educational Teaching Forum*, (46):105-108.
- [11] Zeng Y, 2024, Path Analysis of Digital Technology Empowering High-Quality Development of Ideological and Political

Education in Universities. Shanxi Science and Technology News, (B06).

- [12] Xu J, 2024, Value Orientation, Challenges, and Implementation Paths of Digital Technology Empowering Targeted Ideological and Political Education in Universities. Communication and Copyright, (20):97-100.
- [13] Yang H, 2024, Exploring Digital Technology Empowerment in Teaching Reform of Ideological and Political Education in Universities. Scientific Consultation, (20):120-123.
- [14] Jiang G, 2024, On Integrated Construction of Ideological and Political Education Across Primary, Secondary, and Higher Education Institutions with Digital Technology. School Party Building and Ideological Education, (18):69-71.
- [15] Zeng Z, 2024, Practical Pathways for High-Quality Development of Digital Technology in Ideological and Political Education in Universities. Higher Education Forum, (09):15-21.

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