

Ideological and Political Construction and Implementation of Digital Media Technology Courses for Undergraduate E-Commerce Majors

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Abstract: This study addresses the challenges of embedding ideological and political education within the Digital Media Technology curriculum for E-commerce programs. A structured curriculum system is developed based on a "three-in-one" objective framework, integrating ideological and political elements systematically across teaching activities. A "Politics-Curriculum-Competition-Post" four-dimensional collaborative mechanism is designed to ensure the consistent inclusion of four core ideological and political modules throughout the course. By employing a hybrid "Outcome-Based Education (OBE) + Project-Based Learning" model alongside a multi-faceted evaluation framework, the proposed system demonstrably enhances students' professional competencies, practical abilities, and sense of vocational identity. The findings provide a replicable model for curriculum innovation in higher education, highlighting effective strategies for the integration of ideological and political education into specialized technical courses.

Keywords: higher education; e-commerce; digital media technology; curriculum ideology and politics; teaching reform

1. Introduction

With the rapid development of the digital economy, digital media technology has emerged as a core driver of innovation in e-commerce. In this context, the Digital Media Technology course for e-commerce majors in higher education institutions carries the critical responsibility of cultivating compound talents who possess both professional skills and sound values. The 2020 *Guiding Outline for the Ideological and Political Construction of Curriculum in Colleges and Universities*, issued by the Ministry of Education, explicitly mandates the integration of value-based education into the talent development framework [1]. It emphasizes a comprehensive approach to leverage the educational potential of all courses, thereby providing a roadmap for pedagogical reform in specialized disciplines [2]. The ultimate goal is to achieve a synergistic integration of knowledge transmission, skill development, and value guidance.

Currently, there exists a prevalent tendency to prioritize technical proficiency over holistic competence, with excessive focus on software operation skills while relatively neglecting professional ethics, social responsibility, and cultural self-confidence. This fragmented teaching approach leads to uneven development of students' comprehensive qualities and falls short of meeting the higher standards required of e-commerce professionals in the digital economy era.

Consequently, it is an urgent imperative to systematically construct an ideological and political education system within digital media technology courses, seamlessly integrating value cultivation into professional instruction. This study aims to explore the pathway for ideological and political construction in digital media technology courses for

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e-commerce programs and to provide a reference framework for reforming similar courses through the design of a systematic implementation strategy.

2. Problems in the Ideological and Political Affairs of Digital Media Technology Courses

The E-commerce program currently faces significant challenges in implementing the ideological and political education components within its *Digital Media Technology* course, which hinder the full realization of its intended educational outcomes.

2.1. Superficial Integration of Ideological and Political Elements

At present, the integration of ideological and political education is often superficial and poorly structured. A common misconception confines such education to standalone courses [3], neglecting its systematic incorporation into professional teaching. Many instructors fail to conduct in-depth, interdisciplinary analyses linking E-commerce and digital media, instead applying broad ideological themes loosely to technical content. This "two-skin" approach renders the ideological content abrupt and unconvincing, preventing it from resonating with students. As a result, students tend to perceive value education and skill training as separate domains, limiting the application of values in creative practice.

2.2. Separation of Skill Training and Value Guidance, and Ambiguous Educational Orientation

Curriculum teaching has traditionally emphasized technical proficiency over humanities [4]. Instruction frequently focuses on software operation, such as Photoshop, Premiere, and audio editing, as well as short-term business metrics like click-through rates and conversion rates. In contrast, the cultural connotations, aesthetic considerations, social impact, and ethical dimensions underlying digital media works are often overlooked. Consequently, students may become highly skilled "technical craftsmen" yet lack critical thinking and social responsibility. For example, copyright issues may be disregarded in pursuit of visual effects, ethical boundaries may be challenged during marketing campaigns, and algorithmic biases may emerge in interactive design.

2.3. Industry-Academia Disjunction Undermines Practical Value-Based Education

The integration of ideological and political education is further constrained by a pronounced gap between academia and industry. Rapid industrial changes often outpace curricular updates, and collaborations remain largely superficial. The lack of deep, strategic partnerships deprives students of opportunities to confront complex professional dilemmas-including data privacy, intellectual property, and sustainability-in real-world contexts. As a result, value-based education is confined to theoretical preaching, detached from the practical exercise of ethical judgment, thereby limiting its effectiveness and relevance.

2.4. Evaluation System Overemphasizes Technical Skills, Undermining Ideological and Political Assessment

The current assessment framework for the *Digital Media Technology* course predominantly emphasizes measurable, skill-based outcomes, such as the completion of technical assignments, the visual quality of outputs, and the commercial viability of projects [5,6]. In contrast, evaluation of ideological and political learning outcomes remains underdeveloped, with no mature models or systematic approaches. This deficiency is particularly evident in assessing softer competencies-including teamwork, professional integrity, cultural literacy, and social responsibility cultivated during projects-where clear observational criteria and actionable assessment standards are lacking. The technocentric orientation of evaluation implicitly signals to students that technical mastery is paramount,

while character and value development are peripheral. Consequently, instructors lack effective tools to assess the impact of value-based teaching, impeding its continuous refinement.

3. Constructing a Value-Based Education Framework for Digital Media Technology Courses

To address the challenges identified in previous sections, it is essential to implement reforms from a top-down perspective and establish a systematic, comprehensive, and multi-dimensional framework for embedding value-based education throughout the *Digital Media Technology* curriculum.

3.1. Establishing a "Three-in-One" Curriculum Framework for Holistic Development

Guided by the principle of "fostering virtue and nurturing talents," the *Digital Media Technology* course seeks to cultivate well-rounded e-commerce professionals. Graduates are expected not only to possess advanced technical skills and solid business acumen but also to demonstrate cultural confidence, professional ethics, scientific rigor, social responsibility, and a proactive spirit of innovation. This approach aims to achieve a synergistic integration of knowledge acquisition, competency development, and value shaping [7], ensuring that ideological and political education becomes an inherent component and natural extension of the curriculum.

3.2. Innovating the "Politics-Curriculum-Competition-Career" Integration Model to Form an Educational Closed Loop

This model establishes a cohesive educational cycle that links values with professional practice. *Politics* provides the foundational framework by integrating socialist core values, traditional Chinese culture, and professional ethics. The *curriculum* serves as the carrier, systematically embedding these elements into syllabi and instructional materials. *Competition* acts as a driver, incorporating ideological themes into contests such as the "Internet Plus" innovation competition to reinforce learning and ethical awareness. *Career* offers verification, allowing students to apply and consolidate their professionalism through industry collaboration. Together, these four components form an interlocking cycle that continuously reinforces "value guidance, curricular embedding, competitive cultivation, and professional practice."

3.3. Building a Composite Teaching Team Through Tripartite Collaboration

A collaborative mechanism integrating professional instructors, ideological and political educators, and industry mentors is established to break down traditional role barriers. Professional instructors identify value-based teaching points within the curriculum; political educators provide theoretical guidance to ensure ideological correctness; and industry mentors contribute real-world ethical cases and professional standards. Through joint course design, team teaching, and co-supervision of projects and competitions, this tripartite model enhances instructional quality and fosters a cohesive educational force.

3.4. Developing an Integrated Online-Offline Educational Resource Repository

A digital repository consolidates diverse instructional materials, including case studies on cultural confidence and online ethics, exemplary project portfolios, and virtual simulation experiments. Leveraging established learning platforms, this repository facilitates flexible resource sharing and self-directed learning, thereby extending the reach and impact of value-based education beyond the traditional classroom environment.

4. Designing the Educational Content for the Digital Media Technology Curriculum

Adhering to the principles of coherence, systematic structure, and scientific rigor, this section presents the integration of value-based education into the *Digital Media Technology* course. A comprehensive teaching system is developed, guided by the "Three-Wide Education" model, which methodically embeds ideological and political elements into each instructional unit according to the course's distinctive characteristics [8].

4.1. "Cultural Confidence and Patriotic Sentiments" Module

In the *Brand Visual Identity System Design* unit, students apply traditional Chinese aesthetics to modern branding. By analyzing successful cultural brands such as the *Forbidden City Cultural and Creative* line, they gain confidence in innovating with cultural heritage. In the *E-commerce Landing Page Design* unit, projects aligned with national strategies, such as Rural Revitalization, cultivate students' social responsibility and help them connect professional skills with broader societal objectives.

4.2. "Professionalism and Engineering Ethics" Module

This module explores ethical considerations in digital media practices, including issues such as big data-enabled price discrimination. In the *Online Advertising and Marketing Planning* unit, case studies on false advertising guide students in establishing firm ethical boundaries and a clear sense of professional integrity.

4.3. "Scientific Spirit and Craftsman Spirit" Module

In the *Video Editing and Special Effects Production* unit, instruction emphasizes not only technical proficiency but also rigorous narrative logic, precision in detail, and excellence in lens language expression. Behind-the-scenes footage of exemplary film and television works helps students internalize the craftsman spirit, exemplified by the adage "one minute on stage, ten years off the stage." In the *Front-End Interactive Development* unit, students are required to write standardized code, provide clear annotations, and perform repeated testing, cultivating a meticulous, realistic, and rigorous scientific attitude.

4.4. "Innovation Awareness and Teamwork" Module

The *Comprehensive Project Practice* unit simulates a real e-commerce project team, assigning roles such as product manager, UI designer, front-end developer, and operations specialist. Through collaborative project completion, students learn effective communication, reasonable division of labor, and shared responsibility, experiencing the strength of teamwork. Simultaneously, innovation is encouraged in technology applications, design expression, and business models, coupled with education on intellectual property protection to stimulate creativity and build legal awareness. The integration of these activities and outcomes is summarized in Table 1, which illustrates the alignment of course units with core ideological and political modules and corresponding educational goals.

Table 1. Educational Modules and Course Units in Digital Media Technology.

Ideological and Political Module	Course Unit Examples	Core Ideological and Political Elements	Educational Goals
Cultural Confidence and Patriotic Sentiments	Brand Visual Identity System Design, E-commerce Special Design	Chinese traditional culture, national strategies, national pride	Enhance cultural identity and foster ambition to contribute to national development

Professionalism and Engineering Ethics	User Research and Data Visualization, Online Advertising Planning	Integrity, law-abiding behavior, privacy protection, business ethics, social responsibility	Shape professional ethics, clarify behavioral boundaries, strengthen responsibility
Scientific Spirit and Craftsman Spirit	Video Editing and Special Effects, Front-End Interactive Development	Rigor, realism, excellence, focus, persistence	Cultivate meticulous professional style and pursuit of excellence
Innovation Awareness and Teamwork	Comprehensive Project Practice, Discipline Competition Preparation	Courage to explore, collaboration, respect for intellectual property	Stimulate innovation potential, enhance teamwork, instill adherence to rules

The successful integration of value-based education requires renewed teaching methodologies and thoughtfully designed instructional pathways.

5. Approaches to Value-Based Education in Digital Media Technology

A renewed teaching methodology and thoughtful pathway design are crucial for the successful integration of value-based education.

5.1. Adopting the "OBE + PBL" Hybrid Teaching Model to Integrate Curriculum Ideology and Politics

The Outcomes-Based Education (OBE) philosophy emphasizes learning outcomes. Building upon the OBE framework, the Project-Based Learning (PBL) model enables students to clarify learning objectives and complete challenging, innovative projects in a supportive and open learning environment, aligned with expected learning outcomes and evaluation criteria [9].

Design Principles: Ideological and political objectives are explicitly incorporated into course design. Guided by the overarching principle of "integrity and innovation, educating talents for the country," the curriculum identifies "cultural self-confidence," "professional ethics," "craftsman spirit," and "family and country feelings" as core qualities to be cultivated. Based on these goals, projects with ideological and political significance—such as *Guochao Brand Visual Design* and *Short Videos for Rural Revitalization*—are designed to ensure that professional knowledge acquisition and value guidance proceed in tandem.

- 1) **Implementation Process:** Integration occurs across five stages:
- 2) **Project Release:** Introduce the national *Rural Revitalization* strategy, stimulate students' sense of social responsibility, and clarify the societal value orientation of the project.
- 3) **Project Planning:** Students explore local cultural characteristics, embedding respect for and innovation in traditional culture, thereby fostering cultural self-confidence.
- 4) **Inquiry Projects:** Emphasize technical ethics, including authenticity in data visualization, avoidance of misleading information, and cultivation of integrity.
- 5) **Project Implementation:** During production, emphasize detail excellence, cultivate craftsman spirit, and develop teamwork, communication, and collective responsibility.
- 6) **Project Presentation:** In defense sessions, students articulate the social and humanistic value of their work, reflecting and internalizing these values.
- 7) **Evaluation:** A multi-dimensional assessment framework is employed, explicitly including ideological and political observation points. In the three-dimensional evaluation—*process participation, knowledge and skills, and project results*—criteria such as teamwork dedication, content value orientation, and ethical technology

application are assessed. Evaluation incorporates teacher assessment, self-assessment, and peer review, forming a constructive feedback loop connecting teaching, evaluation, and ethical development.

This hybrid model allows ideological and political education to occur naturally within real-world e-commerce projects, such as developing a full suite of online visual and marketing materials for a new domestic brand.

5.2. Deepening the Practical Path of "Promoting Learning through Competition and Verifying Learning by Post"

Students are actively guided to participate in high-level subject competitions and innovation and entrepreneurship contests. During preparation, dimensions such as cultural significance, social impact, and ethical compliance are explicitly evaluated. For instance, in the *Digital Media Innovation Competition*, students are encouraged to create works showcasing intangible cultural heritage and spreading positive social energy.

Additionally, practice bases are co-established with leading e-commerce companies, MCN institutions, and design firms. Real projects are incorporated as course tasks or graduation projects, exposing students to ethical decision-making and professional standards in authentic business environments, thereby facilitating the internalization of classroom values into conscious action.

5.3. Implementing a Diversified and Process-Oriented Ideological and Political Evaluation Mechanism

The traditional single-focus assessment of technological outcomes is reformed into a comprehensive evaluation system encompassing cognition, emotion, and behavior [10].

- **Diversified Evaluation Subjects:** Assessment incorporates teachers, peers, self-evaluation, and corporate mentors to provide a holistic measure of student development.
- **Comprehensive Evaluation Content:** Ideological and political literacy accounts for a specified weight (e.g., 30%) of project scores. Indicators include social, environmental, and legal impact discussions (social responsibility); integration of cultural elements (cultural self-confidence); teamwork contributions and communication (team spirit); and originality statements and citation compliance (integrity and quality).
- **Evaluation Process:** Emphasizes formative assessment, using platforms such as *Xue-tong* to track participation in discussions, online presentations, and group work, monitoring the evolution of values. End-of-semester quantitative analysis and qualitative feedback via ideological and political goal achievement questionnaires inform instructional improvement.

6. Results

Through a systematic cycle of ideological and political construction and implementation, the *Digital Media Technology* course for e-commerce majors has demonstrated notable improvements in teaching effectiveness.

6.1. Significant Improvement in Students' Comprehensive Quality

The most tangible evidence is reflected in students' performance in various subject competitions. Over the past two academic years, both participation enthusiasm and award levels in the *National College Student Digital Media Science and Technology Works Competition* and the *Internet+ College Student Innovation and Entrepreneurship Competition* have increased markedly. The proportion of award-winning works that integrate traditional Chinese culture, address social issues, and embody the concept of technology for social good has risen substantially. An anonymous end-of-semester questionnaire indicated that over 85% of students felt that the course "not only taught technical skills but also prompted reflection on responsibilities as a designer," with significantly higher recognition of professional ethics, data ethics, and cultural heritage than before the reform.

6.2. Enhanced Teaching Atmosphere and Learning Motivation

Following the adoption of project-based and discussion-oriented teaching, classroom engagement-including students' attentiveness and participation-has significantly improved. Students exhibit stronger collaboration and communication skills in group projects. During case discussions involving ethical dilemmas, they demonstrate rational analysis and value judgment from multiple perspectives, effectively exercising critical thinking. Learning has shifted from mere software operation mastery to an integrated focus on technology, business, and humanities, resulting in a substantial stimulation of students' learning motivation.

6.3. Positive School-Enterprise Cooperation and Talent Feedback

Partner enterprises report that students exposed to the ideological and political curriculum reforms display a more mature professional mindset, stronger adherence to rules, and better teamwork during internships and employment. They adapt more quickly to corporate values and culture and demonstrate increased responsibility and stability. Graduate follow-up surveys indicate that employer satisfaction regarding students' professional ethics, social responsibility, and cultural adaptability has risen by approximately 15%, effectively enhancing both the social reputation of the profession and the employability of graduates.

7. Conclusion

Guided by the core mission of "fostering virtue and cultivating talents," the ideological and political development of the *Digital Media Technology* course for e-commerce majors represents a strategic and systematic initiative essential to high-quality talent cultivation. This requires educators to move beyond the traditional "technical instruction" paradigm and develop a deep understanding of the cultural values and social responsibilities embedded in the digital media domain.

Through systematic analysis of existing challenges, this study constructs a development framework guided by the "three-in-one" objective-integrating knowledge, skills, and value cultivation-implemented via the four-dimensional synergy of "politics-curriculum-competition-career," and supported by a tripartite teacher collaboration mechanism. Modular ideological and political content and diversified teaching strategies have been carefully designed. Practical application demonstrates that this system effectively promotes the deep integration of ideological and political education with professional instruction, significantly enhancing students' comprehensive literacy and educational outcomes.

Looking forward, the course team should continue to refine this approach through practice. First, the repository of ideological and political cases must be regularly updated to keep pace with technological and industrial advancements, ensuring contemporary relevance and vitality. Second, a long-term evaluation and feedback mechanism should be strengthened, incorporating longitudinal tracking of graduates' career development to support continuous course improvement with a scientific evidence base. Ultimately, persistent efforts will position the *Digital Media Technology* course as a key platform for cultivating high-quality e-commerce talents who combine moral integrity with professional competence, integrate knowledge with practice, and provide robust human resource support for the healthy and sustainable development of China's digital economy.

Reference

1. K. Zhang, "Research on Ideological and Political Education of Automobile Major in Higher Vocational Colleges,"
2. C. Huang, "Research on the Design and Implementation of Ideological and Political Curriculum in Normal University," *The Educational Review, USA*, vol. 7, no. 4, pp. 416-420, 2023. doi: 10.26855/er.2023.04.005.
3. J. Knutsson, and L. Tompson, "Advances in evidence-based policing (pp. 1-231)," *Abingdon: Routledge*, 2017.
4. W. Huo, M. Wu, and J. Soar, "Internationalization of China's e-commerce higher education: A Review between 2001 and 2019," *E-Business-Higher Education and Intelligence Applications*, 2023.

5. A. Zhang, L. Sheng, and J. Wang, "Empirical Research on Curriculum-based Ideological and Political Teaching of Universities," *Int. J. Educ. Humanit*, vol. 13, pp. 34-38, 2024. doi: 10.54097/d2ks2x38.
6. C. Dong, "Establishment and Optimization Algorithm of Fuzzy Index Evaluation System for Course Ideological and Political Teaching [J]," *Transactions on Comparative Education*, vol. 6, no. 4, 2024.
7. L. Liu, L. Chen, S. Liu, X. Gong, Y. Yang, and Y. Zhao, "Practice of Management Principles Course Integrated into Ideological and Political Teaching," *Research and Advances in Education*, vol. 1, no. 2, pp. 28-33, 2022. doi: 10.56397/rae.2022.08.06.
8. M. Wang, "The Current Situation and Exploration of Curriculum Ideology and Politics--Take" Electrician and Electronic Technology" as an Example," *Advances in Education, Humanities and Social Science Research*, vol. 7, no. 1, pp. 354-354, 2023.
9. O. SHAABAN, "The Impact of Pre-trained Transformer-Based Language Model Use on Student Learning Out-comes in Higher Education,".
10. Q. Song, J. Li, L. Feng, X. Song, and Z. Liu, "Sensor Principle and Application Course Ideological and Political Teaching Reform," *IJLAI Transactions on Science and Engineering*, vol. 2, no. 4, pp. 58-64, 2024.

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