

# Exploration of Teaching Reform for E-commerce Specialized Courses under Project-Based Approach: Deep Integration of "AI and Ideological and Political Education"

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**Abstract:** The development of ideological and political education within courses is the soul of curriculum design. This paper takes the core e-commerce course "E-commerce Operations and Management" as an example to explore how AI technology can enrich the content of ideological and political education under the frameworks of "New Liberal Arts" and "New Business Studies," achieving deep integration between ideological education and professional training. The teaching team adhered to the principles of "goal-oriented guidance, organic integration, student-centered approach, and diversified evaluation," with the ultimate objective of equipping students with professional e-commerce operational capabilities to lay a solid foundation for future employment and entrepreneurship. The course adopts an innovative teaching model combining "project-based instruction with flipped classroom," "AI-powered ideological education," and "competition-driven practice." In practice, on one hand, ideological elements within the professional knowledge system are systematically identified and seamlessly integrated into the project-based teaching process—from theoretical learning to simulated operations, hands-on practice, and iterative review—achieving subtle yet profound value guidance. On the other hand, AI technology is innovatively employed to enhance ideological education, incorporating the philosophy of "Chinese essence with Western application," blending Eastern and Western approaches to develop teaching cases that draw on classical wisdom to foster students' critical thinking and innovative spirit. This course model has received high praise from both faculty, students, and supervisors within the university. It has demonstrated remarkable effectiveness in guiding students to participate in high-level academic competitions and facilitating their successful employment and entrepreneurship, serving as a practical reference case for similar courses in ideological and political education reform.

**Keywords:** Curriculum-based ideological and political education; E-commerce; Project-based teaching; AI-enhanced teaching; Teaching reform

## 1. Introduction

Comprehensively advancing the ideological and political development of curricula is a strategic initiative to fulfill the fundamental mission of fostering virtue through education. For the highly application-oriented e-commerce discipline, its specialized courses not only impart professional skills such as e-commerce operations, marketing, and data analysis but also cultivate students' social responsibilities—including ethical business practices, fair competition, and innovation and entrepreneurship. The core challenge of current curriculum reform lies in overcoming the long-standing disconnect between professional education and ideological-political education, achieving synergy in knowledge delivery, competency development, and value guidance.

This paper focuses on the "E-commerce Operations and Management" course offered by the E-commerce Department of Guangzhou Xinhua University<sup>[1]</sup>. Since its launch in September 2021, the course has been delivered for five consecutive semesters to students majoring in e-commerce and marketing, serving a total of over 700 students. Through years of teaching practice, the course faculty has developed a distinctive approach to integrating ideological and political education into the curriculum<sup>[2]</sup>. The course was nominated for the "Outstanding Ideological and Political Education Course for E-commerce Majors in Guangdong Province's Undergraduate Institutions" in both 2024 and 2026, receiving the second prize each time. This paper systematically examines the course's ideological

and political teaching design, implementation strategies, distinctive features, and practical outcomes, aiming to provide valuable insights for teaching research and practice in related fields.

## **2. Systematic Design and Implementation Pathway for Ideological and Political Education in Courses**

The integration of ideological and political elements into courses is not a simple embedding but requires a systematically designed teaching initiative. The teaching team for the "E-commerce Operations and Management" course—headed by Lin Shi and comprising faculty members including Professor Guo Meiwen—has established a clear framework for implementing ideological and political education through top-level design.

### ***2.1 Teaching Objectives and Principles of Ideological and Political Education***

The course establishes four-dimensional teaching objectives: "Value Guidance, Knowledge Integration, Competency Transformation, and Teaching Innovation." Specifically, it aims to guide students in developing a sound business ethics perspective and core socialist values (value-oriented); deeply integrate ideological and political elements—including laws and regulations, business integrity, and social responsibility—with professional knowledge of e-commerce operations (such as platform rules and customer relationship management); translate value awareness into concrete actions of ethical business practices and innovative problem-solving through practical projects (competency transformation); and actively explore the application of new technologies like AI to innovate ideological and political teaching methods, while seamlessly incorporating classic historical and contemporary examples from both China and abroad into the curriculum (teaching innovation).

To achieve these objectives, the curriculum adheres to four core implementation principles: First: Goal-oriented Principle: Designing teaching activities guided by clear ideological and political objectives; Second: Organic Integration Principle: Identifying optimal points of convergence between ideological and political content and professional knowledge for seamless integration; Third: Student-centered Principle: Focusing teaching design and evaluation on enhancing students' business competitiveness and supporting their future development; Fourth: Combining multiple assessments with formative evaluation to comprehensively assess students' knowledge, skills, and competencies.

### ***2.2 Key Design Concepts and Implementation Approaches***

#### ***2.2.1 Systematic Analysis with Pre-class Preparation***

During the course preparation and syllabus development phases, the teaching team systematically identifies ideological and political education elements embedded in each chapter, and conducts advance instructional design to ensure such education permeates the entire teaching process, achieving an educational impact that is subtle yet profound.

#### ***2.2.2 AI Technology Empowerment and Innovative Methods for Ideological and Political Education[3]***

A major innovation of this course lies in the integration of AI technology to assist in ideological and political instruction. Drawing on the principle of "Chinese tradition as the foundation, Western knowledge as the application," the teaching team utilizes AI to analyze and distill the core ideological and political concepts of each lesson, automatically generating case studies that blend ancient Chinese philosophical thought with modern business management theories. In essence, ideological and political education has elevated to the level of management philosophy, enabling students to apply these philosophical insights in practical business activities. For instance, when teaching "compliant operations of e-commerce platforms" with AI-assisted preparation<sup>[4]</sup>, educators can combine traditional ethical perspectives such as "a gentleman values wealth but acquires it through proper means" with classic stories—including Yang Zhen's refusal of money, Zihan's acceptance of jade, Gong Yixiu's rejection of fish, and Zigong's integrity in business—along with contemporary cases of internet platform governance. This generates discussion materials that guide students to reflect on the essence of commerce and its social responsibilities. This approach not only enhances teaching efficiency but also integrates wisdom from both ancient and modern contexts, effectively stimulating students' critical thinking, innovative capabilities, and ability to address complex business ethics issues. Additionally, it assists instructors in structuring their teaching frameworks, systematically organizing the steps of

ideological and political education, improving lesson preparation efficiency, and enriching classroom content.

### ***2.2.3 Faculty Development as the Foundation***

The course team places high importance on enhancing teachers' ideological and political competence. Through training programs and teaching research activities, it continuously strengthens the ideological and political standards of subject teachers, ensuring they can guide students to deepen their understanding of professional values and career prospects with profound expertise and sound values.

## ***2.3 Pathways for Deep Integration with Professional Education***

The curriculum design achieves deep integration of ideological and political education with course-based instruction through three core pillars.

### ***2.3.1 Institutional Safeguards***

The professional training program is regularly revised, explicitly incorporating the requirements for ideological and political education in the curriculum into the syllabus of the "E-commerce Operations and Management" course, thereby institutionalizing the objectives of ideological and political education.

### ***2.3.2 Classroom implementation***

In the instructional design of each lesson, the objectives of ideological and political education are integrated as an essential component, ensuring that 'each lesson fosters significant enhancement in philosophical thinking and management principles.'

### ***2.3.3 Practical deepening***

Actively organizing and guiding students to participate in high-level academic competitions such as the "National College Student E-commerce Innovation, Creativity, and Entrepreneurship Challenge" and the "Challenge Cup." Through hands-on experience, students engage in project planning, teamwork, and market competition—from conceptualizing projects and dividing tasks to registering legal entities, developing product selection strategies, organizing promotional campaigns, managing official accounts, and accumulating data—all while implementing authentic operational practices. This enables them to deeply appreciate how ideological principles like "integrity in business operations," "fair competition," and the "craftsman spirit" are translated from theory into practice, laying a solid foundation for their future entrepreneurial endeavors.

## **3. Course Features and Highlights: The innovative "trinity" teaching model**

The innovative "trinity" teaching model is the hallmark of this course, characterized by a framework where project-based instruction serves as the core, supported by AI technology empowerment and competition-based practice as its two pillars.

### ***3.1 Core Feature: The closed-loop project-based learning (PBL)***

Curriculum fundamentally transforms traditional teaching methods by adopting a "theory in class – practice after class" approach<sup>[5]</sup>. Students work in groups to simulate establishing an e-commerce company and operate real online stores outside of class. Classroom instruction follows project timelines, including phased operational progress reviews, group presentations, instructor feedback, and peer evaluations. Based on feedback, students refine their operational strategies and reports before moving on to the next practical phase, followed by a follow-up review and presentation. This comprehensive "learning-practice-feedback-iteration" cycle significantly enhances students' practical skills, collaborative abilities, and capacity to solve real-world business challenges, while integrating ideological and political education through this hands-on learning process.

### ***3.2 Core Highlights: A Diverse and Collaborative Practical Education Platform***

#### ***3.2.1 Competitions as a Driver of Learning, with Significant Outcomes***

The course teaching team actively guides students in participating in academic competitions,

treating these events as an advanced extension of course practice. In recent years, the team led by Professor Lin Shi has won the provincial second prize, while the team under Professor Yang Li has received the provincial first prize; Professor Yang Li herself was also recognized as an "Outstanding Teaching Supervisor." These competitions not only evaluate teaching effectiveness but also serve as a crucial bridge for students to secure internship opportunities, high-quality employment, and even entrepreneurial incubation.

### ***3.2.2 Industry-academia collaboration broadens horizons***

The curriculum actively integrates social resources, organizing student visits to local e-commerce enterprises such as Tianzheng Paper Industry, Kangcai Audio, and Guangzhou Ruitaisen Electronic Technology, while inviting industry leaders to deliver lectures. This enables students to engage directly with frontline operations, acquire practical knowledge, and deepen their professional understanding through authentic marketing experiences<sup>[6]</sup>.

### ***3.2.3 Alumni Support and Knowledge Transmission***

The program has established a "senior mentoring junior" alumni support mechanism, inviting alumni who have achieved success in the e-commerce industry to return to campus and share their work experience. This initiative not only enhances students' industry identity and learning motivation but also fosters a sustainable alumni support network. Some graduates can directly join their seniors' work teams, creating a virtuous cycle of "teaching–employment–alumni support."

## **4. Course Application Outcomes and Social Evaluation**

### ***4.1 Intra-school Evaluation and Student Learning Achievements***

The course received an excellent rating from both college administrators and teaching supervisors. More significantly, its impact is reflected in students' personal growth and professional development. For instance, Zheng Ruimin, a student majoring in E-commerce in the class of 2022, secured a job offer from an AI-powered sensory toy company thanks to the practical experience gained through the "Automotive Decorative Items" project. Meanwhile, Fu Yuhong, a Marketing student from the class of 2020, reflected on his micro-business journey outside of class and realized that the operational techniques he had previously developed were essentially the professional knowledge systematically covered in the course, marking a cognitive leap from "empirical intuition" to "theoretical awareness." These cases vividly demonstrate how the course effectively enables students to transform acquired knowledge into practical skills and enhances their career development.

### ***4.2 Recognition from Peers and Society***

In terms of peer evaluation, the provincial awards won by the course team teachers through guiding academic competitions serve as recognition of the effectiveness of both professional course instruction and ideological and political education<sup>[7]</sup>. Regarding social evaluation, representatives from partner enterprises actively engaged in school-enterprise exchange activities with the course team students, demonstrating their commitment to deepening cooperation and demonstrating the practical value and social impact of the course's practical components.

## **5. Conclusion and Prospects**

The implementation of ideological and political education in the "E-commerce Operations and Management" course demonstrates that successful reform of professional courses requires establishing a systematic, closed-loop teaching framework<sup>[8]</sup>. This approach is guided by clear ideological objectives, employs deep integration as its methodology, utilizes student-centered project-based instruction, leverages AI technology to innovate teaching methodologies, and expands course offerings through diverse platforms such as competitions, industry-academia collaborations, and alumni networks. This "trinity" model not only significantly enhances students' learning outcomes and practical skills but also effectively integrates value cultivation, knowledge transmission, and competency development, providing a replicable paradigm for ideological education in modern business disciplines. Moving forward, the course team will continue advancing teaching reforms, particularly in developing AI-powered case libraries for ideological education, integrating interdisciplinary ideological elements, and implementing scientific evaluations of teaching

effectiveness.

## References

- [1] Zhong Xiaoying, Chen Xiao. *E-commerce Operations and Management [M]*. Beijing: China Water & Power Press, 2024.
- [2] Li Wei, Wang Qin, Wang Yanfang. Exploring pathways for integrating the development of "professional ideological and political education" with "curriculum-based ideological and political education" under the new business education paradigm [J]. *Journal of Beijing Union University*, 2021, 35(02):33–39.
- [3] Zhu Ziting, Dai Ling, Hu Jiao. High-awareness generative learning: A new learning paradigm empowered by AIGC technology [J]. *Research on Electro-education*, 2025,46(01):12-20.
- [4] Zhao Wei, Dou Xinran. Analysis of the Enabling and Restrictive Factors of Generative Artificial Intelligence in Empowering the Teaching Reform of Ideological and Political Courses in Universities [J]. *Journal of University of Electronic Science and Technology of China (Social Sciences Edition)*, 2025, 27(03):112-118.
- [5] Liu Lei. Construction of an Interdisciplinary Advanced Project-Based Practical Teaching System for E-commerce Majors [J]. *Experimental Science and Technology*, 2020,18(06):112-116.
- [6] Hou Man. Research on the Identification and Integration Pathways of Ideological and Political Elements in E-commerce Curriculum at Higher Vocational Colleges: A Case Study of the "Online Store Operations" Course [J]. *Educational Progress*, 2026,16(04):749-756.
- [7] Fan Lei, Zhu Lulu. Research on the Industry-Education Integration Model of Live Streaming E-commerce Operations Courses [J]. *Science, Technology and Economic Market*, 2024(03):156-158.
- [8] Ministry of Education. *Opinions on Deepening the Construction of the Modern Vocational Education System [Z]*. 2023.