

Research on the New Model of School-Enterprise Cooperation for Finance and Economics Majors in the Context of Industry-Education Integration

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Abstract: Against the backdrop of the deep evolution of the digital economy and accelerated industrial transformation, the integration of industry and education has become a critical pathway to align the education of finance and economics majors with the needs of the economic society. However, current school-enterprise cooperation still faces structural challenges, such as the difficulty in reconciling educational logic with business logic, obstructed resource flows, and inefficient operational mechanisms. Based on ecosystem theory and resource orchestration theory, this study constructs a new model of school-enterprise cooperation for finance and economics majors with "value co-creation and ecological symbiosis" as its core concepts. It proposes a "platform-module" structural design and systematically elaborates on its implementation pathways, as well as effectiveness assurance mechanisms that include governance coordination, dynamic resource allocation, and closed-loop evaluation. This research provides a theoretical framework and practical reference for promoting the high-quality transformation of finance and economics education.

Keywords: Industry-Education Integration; Finance and Economics Majors; School-Enterprise Cooperation; Value Co-creation; Ecological Symbiosis; Implementation Pathways

Introduction

As economic restructuring and technological iteration accelerate, the finance and economics sector is placing higher demands on talent with practical capabilities and innovative competencies. Traditional school-enterprise cooperation models are struggling to effectively meet the industry's need for interdisciplinary professionals. As a vital mechanism for integrating the education chain and the industrial chain, the deepened implementation of industry-education integration is essential for enhancing the quality of education in finance and economics majors and fostering the dynamic alignment between educational supply and industrial demands. Existing cooperation models face systemic issues in strategic synergy, resource integration, and cultural alignment, necessitating the development of a more adaptive and sustainable collaborative paradigm. This study aims to analyze the underlying logic of these practical challenges, explore a new model of school-enterprise cooperation under the guidance of integration, and provide theoretical support and practical guidance for the reform of finance and economics education.

1. Practical Challenges and Development Logic of School-Enterprise Cooperation for Finance and Economics Majors in the Context of Industry-Education Integration

1.1 Theoretical Connotation and Contemporary Characteristics of Industry-Education Integration

As a talent cultivation concept, industry-education integration has its theoretical core in the deep alignment between the mode of knowledge production and the operational logic of the modern economy and society. It transcends the simple talent supply relationship between traditional educational institutions and industrial organizations, and constructs a collaborative ecosystem characterized by knowledge flow, resource complementarity, and value co-creation. In this system, the production of theoretical knowledge and the innovation of applied knowledge are no longer linear transmission processes, but exhibit complex characteristics of interactivity, networking, and iterativity. The mutual penetration and recombination of educational elements and industrial elements aim to eliminate the inherent boundaries between the knowledge domain and the practice domain, forming a dynamically

balanced symbiotic relationship^[1].

The evolution of contemporary socio-economic environments has endowed industry-education integration with new contemporary characteristics. The in-depth development of the digital economy drives profound changes in industrial forms and occupational structures, imposing new demands on the competency spectrum of finance and economics talents, such as data analysis skills, business insight, and cross-border integration capabilities. The deep integration of globalization and information technology makes business practices increasingly complex and uncertain, which requires finance and economics education to closely track industry frontier dynamics and integrate real-world business challenges and opportunities into the entire teaching process. The rapid shortening of the knowledge update cycle makes it difficult to cultivate professionals with sustainable competitiveness solely relying on the on-campus curriculum system, thereby strengthening the necessity for the education system to maintain high-frequency interaction with the external industrial environment. These contemporary characteristics collectively constitute the macro background and internal motivation for currently promoting the deepening of school-enterprise cooperation for finance and economics majors.

1.2 The Essential Nature and Manifestation Dimensions of the Dilemmas in School-Enterprise Cooperation for Finance and Economics Majors

In the current practice of school-enterprise cooperation for finance and economics majors, a series of structural and functional dilemmas are encountered. The essence of these dilemmas can be attributed to the difficult-to-reconcile tension between educational logic and business logic. This tension stems from systematic differences between the two parties in terms of organizational goals, operational pace, value measurement standards, and preferences for knowledge forms. Educational institutions focus on the systematic and abstract transmission of knowledge and the long-term development of individuals, following relatively stable academic cycles. In contrast, business organizations prioritize operational efficiency, market responsiveness, and direct economic benefits, dealing with a rapidly changing market environment.

These inherent tensions manifest concretely as practical dilemmas across multiple dimensions. At the strategic level, cooperation often lacks long-term and systematic top-level design, with many interactions remaining at the level of temporary, project-based engagements, failing to form a stable strategic symbiont. At the resource integration level, there is a significant phenomenon of obstructed resource flow and misallocation. The theoretical and research resources possessed by schools are difficult to directly transform into practical solutions for enterprises. Meanwhile, the practical scenarios, business data, and expert experience held by enterprises cannot be smoothly integrated into the teaching process due to confidentiality concerns, lack of standardization, or the absence of effective knowledge extraction mechanisms. At the operational mechanism level, the cooperation process lacks effective collaborative governance structures and communication channels, making it difficult to translate cooperative intentions into actionable and sustainable plans. At the cultural integration level, invisible barriers exist between the rigor and critical nature of academic culture and the practical, result-oriented nature of business culture, hindering deep mutual understanding and trust-building among the cooperating entities. For finance and economics majors, the highly applied nature of their knowledge and service-oriented characteristics make the effectiveness of cooperation particularly dependent on deep contextual embedding, which makes the aforementioned dilemmas especially pronounced.

1.3 The Theoretical Basis and Practical Evolution of the Development Logic

Addressing the practical dilemmas in school-enterprise cooperation for finance and economics majors requires following its inherent development logic, which is grounded in a solid theoretical foundation and demonstrates a clear evolutionary trajectory in practice. Its theoretical roots are primarily anchored in several key areas: ecosystem theory regards school-enterprise cooperation as an open, interdependent complex system, emphasizing mutualism and co-evolution among various entities; resource dependence theory reveals the necessity for organizations to acquire critical resources through external cooperation to sustain survival and development, explaining the fundamental motivation for both schools and enterprises to seek collaboration; knowledge management theory, particularly research on the conversion between tacit and explicit knowledge, provides an analytical framework for understanding the micro-level mechanisms of knowledge flow and creation between schools and enterprises.

From the perspective of practical evolution, the development logic of school-enterprise cooperation for finance and economics majors demonstrates a progression from unidirectional linear relationships to multidimensional network relationships. In the early stages, cooperation primarily manifested as simple supply-and-demand relationships oriented toward talent recruitment, with relatively singular forms of collaboration. Subsequently, it entered a functional complementarity phase, where the scope of cooperation expanded to include curriculum development, part-time teacher appointments, and student internships, yet schools and enterprises largely maintained their independent operational systems. The current trend points toward a deep integration phase characterized by value co-creation, marked by blurred boundaries and interwoven functions^[2]. At this stage, schools and enterprises jointly define problems, co-design solutions, and collaboratively create value, potentially giving rise to new organizational forms such as jointly established industry colleges, collaborative innovation centers, and embedded laboratories. The content of cooperation has also expanded from solely talent cultivation to broader areas including joint technological research, business model innovation, and industry standard formulation. The core driving force behind this evolutionary logic lies in systematically reducing cooperation transaction costs and enhancing knowledge conversion efficiency through the establishment of closer institutionalized connections, ultimately achieving the unification and enhancement of educational value and business value.

2. Construction of a New Model of School-Enterprise Cooperation for Finance and Economics Majors Guided by Deep Industry-Education Integration

2.1 Theoretical Support and Core Concepts for the New Model Construction

The construction of this new model does not emerge from a vacuum; its foundation is deeply rooted in a series of interconnected theoretical systems. Strategic alliance theory provides an analytical framework for understanding the motivations, governance structures, and stability of cross-organizational cooperation, indicating that schools and enterprises can achieve resource complementarity, risk sharing, and synergistic competitive advantages by forming strategic alliances. Resource orchestration theory further deepens this understanding, emphasizing that merely possessing heterogeneous resources is insufficient for value creation; the key lies in how to proactively integrate and utilize the knowledge, technological, and contextual resources dispersed between schools and enterprises through processes of structuring, bundling, and leveraging, thereby transforming them into unique teaching capabilities and innovative outcomes. Knowledge innovation ecosystem theory elevates the perspective to the systemic level, proposing that school-enterprise cooperation constitutes a dynamically evolving knowledge ecosystem whose healthy operation relies on diverse participants, smooth knowledge flows, and efficient value creation cycles.

Based on the aforementioned theories, the core concepts of the new model construction focus on "value co-creation" and "ecological symbiosis." The concept of value co-creation transcends the traditional notions of unidirectional service or resource exchange, emphasizing that both schools and enterprises, as equal partners, jointly define key issues in talent cultivation and business challenges, collectively invest resources, participate in processes together, and share the comprehensive value created. The concept of ecological symbiosis advocates breaking down organizational barriers and promoting the mutual penetration and organic integration of educational logic and industrial logic, aiming to form a collaborative development community with blurred boundaries, interwoven functions, and capacity for self-evolution. This concept requires shifting the cooperation mindset from zero-sum game thinking to positive-sum game thinking, focusing on the long-term vitality and sustainability of the entire cooperative system.

2.2 Element Integration and Structural Design of the New School-Enterprise Cooperation Model for Finance and Economics Majors

The effectiveness of the new model relies on the systematic integration of key cooperative elements and sophisticated structural design. The core elements encompass four dimensions: objectives, content, resources, and participants. The objective element must transition from a singular employment orientation to a compound competency orientation, aiming to simultaneously enhance students' professional literacy, vocational skills, and innovative thinking. The integration of content elements requires systematically incorporating authentic industry projects, cutting-edge issues, and agile working methods into the curriculum system and teaching modules, thereby constructing highly contextualized learning content. The integration of resource elements includes data resources, technological platforms,

expert expertise, and physical spaces, with the key lying in establishing standardized interfaces and dynamic sharing mechanisms for these resources. The participant element emphasizes multi-stakeholder involvement, with core participants including university departments and partner enterprises, while also extending the network to incorporate industry organizations and research institutions.

In terms of structural design, the new model exhibits platform-based and modular characteristics. The platform-based structure refers to establishing a stable, institutionalized foundational platform for school-enterprise cooperation. This platform serves as a hub for resource aggregation, information exchange, and collaborative management, providing underlying support for various cooperative activities. Deployed upon this platform are a series of flexible, configurable functional modules. These modules may include "micro-degree" programs focused on cutting-edge fields, "project-based" learning modules formed around specific real business challenges from enterprises, "dual-teacher collaborative" teaching modules involving participation from both school and enterprise personnel, and "immersive" practical training modules utilizing authentic enterprise data and environments. This "platform + module" architecture ensures both the stability of cooperative relationships and the intensive utilization of resources, while also endowing the cooperation model with the agility and adaptability needed to respond to rapid industrial changes^[3].

2.3 Synergistic Mechanisms and Innovation Pathways for Model Construction

To ensure the new model transitions from theoretical conception to stable operation, a set of inherent synergistic mechanisms must be established. The governance and coordination mechanism serves as the foundation; it involves the formulation of cooperation charters, the establishment of joint management committees, and the clear definition of rights and responsibilities, aiming to provide institutional guarantees for cross-organizational collaboration. The knowledge flow mechanism constitutes the core of the new model; it requires structured workshops, project debriefings, and knowledge base development to facilitate the bidirectional conversion and spiral escalation of tacit and explicit knowledge between schools and enterprises. The benefit balancing mechanism focuses on the equitable distribution of created value; by designing diverse forms of value return—such as academic achievements, reputation enhancement, and talent reserves—it sustains the long-term motivation for participation among all cooperating parties. The dynamic feedback and optimization mechanism relies on establishing a set of scientific monitoring indicators to continuously track the cooperation process and outcomes, forming closed-loop management and driving the self-improvement of the model.

Regarding innovation pathways, the construction of the new model emphasizes exploration and foresight. One pathway involves digital transformation, exploring the construction of "digital twin" teaching scenarios that utilize desensitized enterprise data and business processes to replicate highly realistic business operation environments in virtual space, providing students with low-cost, high-efficiency, and repeatable decision-making training. Another pathway explores the integration of "R&D-based learning," extending cooperation from purely talent cultivation to jointly addressing common technical challenges or business model innovation problems within the industry. This enables students to complete their learning while participating in genuine innovation projects, simultaneously contributing intellectual outcomes to the partner enterprises. Furthermore, constructing an open, flexible, and networked cooperation community represents another important pathway. By introducing more diverse external entities, it enriches the diversity of the cooperation ecosystem, stimulates broader synergistic effects, and enhances the model's resilience in coping with uncertainties.

3. Research on the Implementation Pathways and Effectiveness Assurance Mechanisms of the New Model

3.1 Systematic Planning and Phased Implementation Pathways

The implementation of the new model follows a systematic pathway that progresses from specific points to broader areas in a gradual manner. Its planning logic is based on organizational change theory and project management methodology. The initial phase focuses on establishing the cooperation foundation and verifying feasibility, a process characterized by distinct exploratory and demonstrative features. By forming joint working groups with decision-making authority, establishing mutually recognized strategic visions and evaluation criteria, and conducting small-scale pilot projects in typical disciplines such as accounting and financial technology, initial risks can be effectively controlled. The

core objective of this phase is to verify the smoothness of cooperation processes and the effectiveness of resource integration, while simultaneously building preliminary collaborative trust and social capital. Key outputs should include not only standardized operating procedures and communication paradigms, but also replicable cooperation templates and problem-solving solutions, thereby laying a solid institutional and relational foundation for subsequent scaling.

After the pilot experience has been sufficiently validated, the implementation process enters the expansion and systematization phase. The advancement of this phase must follow the logic of gradual reform, maintaining both the continuity of reform momentum and the controllability of the reform process. The scope of cooperation expands horizontally from pilot areas to more finance and economics majors such as financial management and international trade, while vertically penetrating the entire talent cultivation chain, covering multiple dimensions including joint curriculum development, collaborative cultivation of dual-qualified faculty, and experimental platform sharing. This phase requires establishing more refined project management standards and efficient information synchronization mechanisms, particularly building a cross-organizational knowledge management system to address the management complexity and information asymmetry challenges arising from expanded cooperation scale. The ultimate goal of this phase is to fully embed the new model into the core system of professional talent cultivation, forming an institutionalized, normalized, and self-renewing operational state that achieves a fundamental transition from "project-based cooperation" to "ecosystem integration".

3.2 Mechanism Construction and Resource Coordination for Effectiveness Assurance

Ensuring the efficient operation of the new model relies on a multi-layered and interconnected framework of mechanisms, the design of which draws on core concepts from modern organizational governance and systems engineering. The governance mechanism forms the top-level structure of effectiveness assurance, requiring legally binding cooperation agreements to clarify the composition principles, authority boundaries, and decision-making processes of joint management bodies, thereby establishing a consensus-based conflict resolution mechanism. The operational mechanism represents the concrete implementation of the governance framework; it standardizes the entire chain of operational specifications from demand alignment and project design to process monitoring and outcome evaluation, ensuring the standardization and traceability of cooperative activities^[4]. The communication and coordination mechanism provides informational support for both governance and operations; through regular joint meetings, thematic seminars, and multi-level dialogue platforms, it constructs a transparent and efficient information transmission network, effectively preventing and resolving cognitive deviations and goal drift during the cooperation process.

Resource coordination serves as the material foundation for effectiveness assurance, with its core lying in achieving dynamic and precise matching of supply and demand. This requires building a flexible resource allocation system to conduct integrated management of key elements such as human resources, data, platforms, and funding. This is achieved by establishing project-oriented dedicated resource pools and designing data sharing protocols under secure and standardized guidelines, ensuring that high-value resources are accurately allocated to the highest-priority cooperation areas. This coordination model aims to transcend static resource distribution, shifting towards an intelligent supply mode capable of responding to dynamic changes in the cooperation process.

3.3 Dynamic Assessment and Continuous Optimization Cycle System

Constructing a scientific assessment system is the prerequisite for driving the continuous optimization of the model. This system must transcend traditional single outcome indicators and integrate multidimensional measurement criteria, including procedural and developmental aspects. Procedural indicators focus on resource utilization rates and process compliance, while developmental indicators measure the value-added enhancement of student competencies, achievements in teaching innovation, and the effectiveness of business problem-solving solutions. Through periodic data collection and joint diagnostic analysis, the operational effectiveness and potential bottlenecks of the cooperation system can be objectively revealed^[5].

The optimization cycle based on assessment findings is key to maintaining the model's vitality. Diagnostic conclusions are systematically translated into specific improvement action plans, which may involve process reengineering, content updates, or resource reallocation. This forms a complete closed-loop management process of "assessment-diagnosis-optimization-reassessment," enabling the

cooperation model to learn and iterate from its own operational experience. This cyclical system transforms a static cooperation blueprint into a living system with adaptive capabilities, ensuring its continuous evolution and effectiveness enhancement through interaction with the external environment^[6].

Conclusion

This study, by analyzing the practical challenges of school-enterprise cooperation for finance and economics majors in the context of industry-education integration, has constructed a new cooperation model oriented toward value co-creation and ecological symbiosis, and proposed systematic implementation pathways and effectiveness assurance mechanisms. The new model enhances the agility and sustainability of cooperation through its platform-based architecture and modular design, while dynamic assessment and resource coordination mechanisms provide institutional guarantees for its practical effectiveness. Future research could further focus on digital empowerment pathways for the cooperation model, construction mechanisms for cross-regional cooperation networks, and cultivation strategies for long-term collaborative culture, thereby continuously improving the quality of school-enterprise cooperation and promoting the connotative development of finance and economics education through deep integration.

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