Research on the Diversified Joint Training Model for Vocational Undergraduate Financial Talents

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Abstract: *With the accelerated digital transformation and integrated development trends in the financial sector, the traditional talent training model led by a single entity can no longer meet the industry's demand for interdisciplinary financial talents. This paper takes the diversified joint training model for vocational undergraduate financial talents as its research subject. By constructing a trinity research system comprising a "theoretical framework, collaborative mechanism, and implementation path," it systematically elaborates on the theoretical foundation, core elements, and logical model of diversified joint training. The paper analyzes the roles and operational processes of entities such as vocational colleges, financial institutions, and industry associations in collaborative education. Furthermore, it proposes phased implementation paths and safeguard measures, including resource integration and risk prevention and control. The research demonstrates that this model, through its multi-level collaboration and dynamic optimization mechanisms, can effectively enhance the alignment between talent training and industry needs, providing theoretical reference and practical guidance for innovating the vocational undergraduate financial education system.*

Keywords: *Vocational Undergraduate Education; Financial Talents; Diversified Joint Training; Collaborative Mechanism; Industry-Education Integration*

Introduction

The digital transformation and industrial convergence within the financial sector have imposed higher requirements on the competency structure of professionals. As a crucial link bridging higher education and the vocational system, vocational undergraduate education urgently needs to break through the limitations of traditional training models and establish an innovative mechanism characterized by multi-entity collaboration in education. Currently, a structural misalignment exists between the supply of financial talents and industry demands. The training model predominantly led by single institutions shows significant deficiencies in resource integration, knowledge updating, and competency development. In contrast, the diversified joint training model, by integrating the resources and strengths of academic institutions, enterprises, and industry organizations, can enhance the adaptability, professionalism, and foresight of talent development. This study systematically explores the diversified joint training model for vocational undergraduate financial talents from three aspects: theoretical construction, mechanism design, and implementation path. It aims to provide theoretical support and a practical framework for advancing the reform of the financial vocational education system and improving the quality of talent supply.

1. Construction of the Theoretical Framework for Diversified Joint Training of Vocational Undergraduate Financial Talents

1.1 Tracing the Theoretical Foundations of Diversified Joint Training

The construction of the diversified joint training model requires a solid theoretical foundation as support. Its theoretical origins primarily draw from three core areas. Synergy theory provides a systematic methodology for this model. This theory emphasizes that interactions between different subsystems can produce an effect where the whole is greater than the sum of its parts, offering a principled explanation for cooperation among educational institutions, industrial entities, and other social organizations. Human capital theory, from an economic perspective, demonstrates the relationship between investment in talent training and future returns, indicating the economic

rationality and intrinsic motivation for multiple entities to jointly invest in the development of vocational undergraduate financial talents[1]. Constructivist learning theory lays the theoretical foundation for the talent training process. This theory proposes that knowledge is constructed through social interactions in specific contexts, which provides a theoretical basis for learning through mentorship programs, project-based teaching, and other methods in real enterprise scenarios. These theories collectively form the logical starting point for diversified joint training, ensuring the scientific nature and foresight of the framework from the perspectives of system operation, economic drivers, and cognitive laws, respectively.

1.2 Analysis of the Core Components in Cultivating Vocational Undergraduate Financial Talents

The core components of cultivating vocational undergraduate financial talents form a multidimensional and interconnected organic whole. The knowledge component constitutes the foundational layer, which transcends traditional disciplinary boundaries and requires the integration of classical financial theory, modern information technology knowledge, and industry regulations and standards, thereby forming an interdisciplinary knowledge structure. The ability component represents the key output of the training process, focusing on the capacity to solve complex financial problems in real-world work contexts, including financial product design and pricing, risk assessment and control, data analysis and decision-making, as well as customer relationship management. The literacy component determines the talent's potential for sustainable development, encompassing professional ethics and compliance awareness, market integrity, cross-cultural communication skills, and the adaptive capacity for continuous learning. These components are not merely listed in parallel but are progressively layered and mutually reinforcing, collectively defining the distinctive characteristics that set vocational undergraduate financial talents apart from ordinary academic talents and other levels of vocational professionals.

1.3 The Logical Hierarchy and Integrated Model of Theoretical Framework Construction

Based on the theoretical foundations and core components, the theoretical framework for the diversified joint training of vocational undergraduate financial talents demonstrates a clear logical hierarchy. The macro level focuses on strategic synergy, involving multiple entities in jointly formulating training objectives and standards aligned with the development direction of the financial industry. The meso level concentrates on mechanism design, constructing organizational and institutional systems that ensure resource flow, information sharing, and process management among educational institutions, enterprises, and other organizations. The micro level is implemented in teaching practices, designing curriculum and activity plans that integrate theoretical instruction, skill training, and professional literacy cultivation.The proposed integrated model can be termed the "Strategy-Mechanism-Curriculum" three-dimensional model. This model emphasizes two-way feedback and dynamic adjustment relationships among the three levels: strategy guides mechanism design, mechanisms ensure curriculum implementation, and feedback from curriculum and teaching outcomes in turn optimizes strategies and mechanisms. This forms a closed-loop, continuously improving training system, ensuring that talent cultivation activities remain synchronized with industry evolution and individual development needs.

1.4 Design of Training Objectives and Competency Structure Under the Framework Guidance

Under the overall guidance of the theoretical framework, the training objectives are specifically defined as cultivating high-level technical and skilled talents who can adapt to the transformation of financial formats, master solid financial theoretical knowledge and modern technology application skills, and possess exceptional professional literacy and lifelong learning capabilities. The corresponding competency structure design exhibits characteristics of modularization and integration. This structure typically consists of three main modules: foundational universal abilities, professional core competencies, and cross-border integrated abilities.

The foundational universal abilities module includes financial quantitative analysis, financial statement interpretation, and economic phenomenon analysis. The professional core competencies module focuses on specific financial fields, such as investment and financing analysis, fintech application, wealth management planning, and financial risk control. The cross-border integrated abilities module reflects the interdisciplinary characteristics of vocational undergraduate talents, emphasizing the comprehensive application of business communication, project management,

innovative thinking, and ethical judgment in complex financial environments. This design of the competency structure ensures that the output specifications of talents not only meet the requirements of current job competencies but also possess the resilience to cope with future career changes[2].

2. Research on the Construction of a Multi-Entity Collaborative Education Mechanism

2.1 Role Positioning and Functional Division of Collaborative Education Entities

The effective operation of the multi-entity collaborative education mechanism is based on the clear role definition and functional complementarity of all participating entities. Vocational colleges, as the primary organizers of the talent development system, undertake the core responsibilities of foundational theory instruction, systematic knowledge impartation, and the standardization of teaching processes. Their functions extend beyond traditional curriculum implementation to include integrating cross-domain resources, building bridges between theory and practice, and maintaining educational quality systems. Financial institutions, as key participants in value co-creation, have a functional role that surpasses simply providing internship venues, delving deeper into the input of industry standards, the replication of real business scenarios, and the cultivation of professional culture[3]. By dispatching experienced practitioners to participate in instructional design, providing cutting-edge case resources, and co-establishing practical training platforms, financial institutions directly embed job competency models and industry development trends into the entire talent cultivation process.

Industry associations and professional certification bodies play the unique roles of neutral coordinators and standard guardians within the collaborative system. Their core functions are manifested in establishing industry-wide talent competency benchmarks, promoting the mutual recognition of qualification frameworks, building information sharing hubs, and facilitating inter-organizational knowledge flow. This division of roles constructs an interdependent functional network, where the absence of any party's functions would impair the operational effectiveness of the overall system. While maintaining their organizational independence, the various entities form a tightly coupled educational community through functional complementarity, providing multi-dimensional support for talent development. This collaboration model, based on professional division of labor, ensures the precise alignment between educational resources and industry demands.

2.2 Intrinsic Motivations and External Driving Factors in Mechanism Construction

The establishment and sustained evolution of the collaborative education mechanism are influenced by both an intrinsic motivation system and an external driving environment. The intrinsic motivation stems from the strategic considerations of each participating entity regarding resource complementarity and value co-creation. Vocational colleges seek to enhance the social adaptability of their educational outcomes and the employment competitiveness of their graduates by deepening industry-education integration, thereby strengthening the influence of their educational brand. Financial institutions focus on the forward-looking investment in human resource development; by participating in the training process, they can access potential talents who are better aligned with organizational culture and development needs, significantly reducing recruitment adaptation costs and pre-job training investments. Industry associations are committed to promoting the overall elevation of industry talent standards, which is directly related to the sector's overall innovative capacity and development quality[4].

The external driving environment consists of industrial technological transformation and evolving market structures. Deep integration of FinTech, digital restructuring of financial services, and evolving global financial regulations have imposed unprecedented interdisciplinary demands on talent development. Single educational entities struggle to independently cope with rapid changes in knowledge and skills, creating external pressure for collaboration. Accelerating knowledge renewal and blurring disciplinary boundaries further necessitate this cooperation. Combined intrinsic and external pressures stimulate the collaborative mechanism's formation and continuous optimization.

2.3 Operational Procedures for Information Sharing and Decision-Making Coordination

The processes of information sharing and decision-making coordination form the neural network system for the efficient operation of the collaborative education mechanism. The establishment of the information sharing mechanism aims to break down the information silos created by traditional

organizational boundaries, with its core being the creation of a structured and standardized information exchange platform. This platform systematically integrates multidimensional information, including talent demand forecasting data, curriculum resource repositories, teaching process records, student competency profiles, and industry technology trends. It provides decision-making support to all participating parties through data mining and analysis technologies. This deep-level information integration enables educational institutions to dynamically adjust teaching priorities and allows enterprises to precisely intervene in the training process, achieving a two-way match between talent supply and job requirements in terms of both quality and structure.

The decision-making coordination process manifests at two interconnected levels: strategic planning and operational execution. At the strategic level, a joint governance committee composed of representatives from all parties is established to form an institutionalized consultation and decision-making mechanism responsible for reviewing major issues such as training objectives, competency standards, and resource allocation plans. At the operational level, specialized working groups-such as program development committees, curriculum development teams, and quality monitoring panels-are set up to establish routine communication and coordination channels. This ensures effective coordination across all stages, from curriculum content updates and internship arrangements to graduation assessments. This layered decision-making structure not only guarantees consistency in strategic direction but also grants flexibility at the execution level, forming an efficient governance model that is both centralized and decentralized.

2.4 Mechanism Effectiveness Evaluation and Dynamic Optimization Strategies

The long-term effectiveness of the collaborative education mechanism relies on a scientific evaluation system and a continuous optimization cycle. The effectiveness evaluation framework should adopt a multidimensional, multi-entity comprehensive indicator system that focuses both on the final output quality of talent cultivation and the operational efficiency and sustainability of the mechanism itself. Output quality indicators include students' core competency attainment, professional qualification acquisition rates, employment adaptability, and medium-to-long-term career development trajectories. Operational efficiency indicators cover process elements such as resource input-output ratios, cooperation project completion quality, the depth of participation from all parties, and communication and decision-making costs. Introducing third-party professional institutions for evaluation can enhance the objectivity and credibility of the assessment results.

Dynamic optimization strategies based on evaluation results are crucial for maintaining the mechanism's vitality. This strategy is essentially a continuous PDCA cycle management process, involving the systematic collection of evaluation data, identification of bottlenecks and obstacles in the mechanism's operation, formulation of targeted improvement plans, and implementation of structural adjustments. Optimization priorities may involve multiple dimensions, such as the redefinition of role divisions, innovation in resource sharing models, functional upgrades of information platforms, and the streamlining of decision-making procedures. This spiral, ascending optimization mechanism endows the entire collaborative system with self-repairing and evolving capabilities, enabling it to respond sensitively to external environmental changes and continuously enhance the adaptability and foresight of the education mechanism. The institutionalization and normalization of the optimization process are fundamental guarantees for maintaining the vitality of the collaborative education mechanism.

3. Implementation Path and Support System Oriented to the Needs of the Financial Industry

3.1 Analysis of Financial Industry Development Trends and Talent Demand Characteristics

The contemporary financial industry is undergoing a paradigm shift characterized by digitalization, integration, and specialization. Digital transformation drives the intelligent restructuring of business processes, with key technologies such as artificial intelligence and blockchain evolving from auxiliary tools to core business infrastructures. Integrated development leads to the blurring of traditional financial service boundaries, accelerating the convergence of banking, securities, insurance, and technology services to form an ecosystem-based service system. Meanwhile, the degree of specialization in segmented fields such as quantitative trading and green finance continues to deepen, placing higher demands on the vertical knowledge depth of professionals[5].

This transformation directly reshapes the competency requirements for financial talents. The market demands practitioners to build a composite competency structure that integrates financial professional

literacy, data analysis capabilities, and technological understanding. Specifically, this is reflected in the need to master the core principles of financial product design and risk pricing, while also possessing the practical ability to utilize technological tools for quantitative analysis and model construction. As the importance of financial ethical issues increases, professional ethics and compliance awareness have become critical dimensions in talent evaluation. This evolution in demand requires the vocational undergraduate training system to break down traditional disciplinary barriers and establish a more flexible and forward-looking knowledge-competency framework.

3.2 Phased Objectives and Key Task Design of the Implementation Path

The design of the implementation path must follow the principle of progressive advancement, establishing a clear system of phased objectives. In the initial phase, the core objective is to complete the construction of the fundamental competency model and the modernization of the curriculum system. Key tasks include establishing a curriculum development team composed of academic and industry experts, systematically analyzing job competency requirements, restructuring teaching content and methodologies, and establishing a curriculum standard system synchronized with industry development. This phase requires the completion of modular design for core courses and the preliminary establishment of a bridge for school-enterprise cooperation, laying the necessary foundation for subsequent deeper collaboration.

In the deepening phase, the focus shifts to the comprehensive innovation of the teaching process and the in-depth construction of collaborative mechanisms. Key tasks at this stage include the systematic introduction of project-based learning and case-based teaching methods, the development of comprehensive practical training projects based on real business scenarios, and the establishment of a stable two-way talent exchange mechanism. This entails institutional teachers participating in enterprise project research and enterprise experts deeply engaging in teaching activities. Simultaneously, a comprehensive quality monitoring and feedback system needs to be established to continuously collect teaching process data and graduate development data, providing a basis for the optimization of the training plan. Finally, in the maturity phase, a self-renewing, continuously optimized educational ecosystem is formed, achieving a virtuous cycle between talent cultivation and industrial development.

3.3 The Safeguarding Role of Policy Support and Institutional Environment

A favorable institutional environment serves as a crucial guarantee for the successful implementation of the diversified joint training model. Macro-level institutional support is primarily reflected in establishing a mechanism for aligning standards between the industry and education sectors, promoting the organic integration of vocational qualification frameworks and academic certificate systems, thereby providing clear specification guidelines for talent cultivation. Meso-level institutional design needs to focus on constructing incentive-compatible participation mechanisms. By establishing special development funds, certifying high-quality cooperative projects, and other methods, it guides resources from all parties to converge in the field of collaborative education, forming a sustainable cooperation model.

At the specific operational level, the core of institutional safeguards lies in establishing standardized operating rules and quality benchmarks. This includes formulating guidelines defining the rights and responsibilities of cooperating parties, mechanisms for resource sharing and benefit distribution, standards for teaching quality monitoring, and measures for protecting student rights and interests. Simultaneously, flexible teaching management systems are required to accommodate the needs of new teaching models such as work-study alternation and project-based learning. The reform of the academic evaluation system is equally crucial. A diversified evaluation system capable of recognizing industrial contributions should be established, incorporating the outcomes of participation in talent cultivation into the performance assessments of the relevant parties, thereby forming an institutional incentive orientation[6].

3.4 Systematic Measures for Resource Integration and Risk Prevention and Control

Resource integration forms the material foundation for the operation of the training model, with its core lying in establishing a cross-organizational resource sharing mechanism. Key tasks include constructing unified faculty resource pools, curriculum resource repositories, and practical training platform networks to achieve efficient flow and optimal allocation of educational resources.

Laboratories and innovation centers jointly built by schools and enterprises should integrate both teaching and research functions, forming a virtuous cycle where teaching and innovation mutually reinforce each other. The development of digital platforms is particularly crucial, as it can transcend temporal and spatial limitations to enable the broad sharing of courses, software, and data resources.

The risk prevention and control system needs to establish management plans addressing potential risks during the cooperation process. Primary risks include goal conflicts, intellectual property disputes, inadequate protection of student rights and interests, and fluctuations in cooperation quality. Countermeasures should encompass the formulation of standardized agreements, establishment of specialized quality monitoring and dispute mediation mechanisms, and improvement of student rights protection systems. Particularly, it is necessary to establish regular evaluation and orderly exit mechanisms. Through routine monitoring, cooperation quality can be ensured, while standardized exit channels are provided for unsustainable cooperative relationships, effectively controlling participation risks for all parties.

Conclusion

This study systematically constructs the theoretical framework, collaborative mechanism, and implementation paths for the diversified joint training of vocational undergraduate financial talents. It clarifies the functional division of labor and collaborative logic among multiple entities and proposes a phased strategy system along with corresponding safeguard measures. The research demonstrates that this model, through the organic integration of theoretical guidance, mechanism guarantees, and path implementation, can effectively promote the efficient alignment of educational supply with industry demands and enhance the interdisciplinary competencies and career adaptability of talents. Future research could further focus on the empirical analysis of training effectiveness, the optimization paths for dynamic adjustment mechanisms, and differentiated strategies for applying the model in various regional contexts. Concurrently, deeper exploration is warranted in areas such as the construction of digital platforms, the development of interdisciplinary curricula, and the articulation with lifelong learning systems, to continuously improve the systematicness and foresight of vocational undergraduate financial talent cultivation.

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