

## Article

# Research on Enrollment-Treatment-Employment Linkage Mechanism and Quality Feedback for Finance and Economics Majors Based on OBE Concept

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**Abstract:** In the era of digital economy development and deepening economic globalization, finance and economics programs face new requirements that shift the focus from simple knowledge transmission to the systematic enhancement of students' professional competencies. Outcome-Based Education (OBE), an innovative teaching philosophy centered on clearly defined learning outcomes, provides a useful framework for addressing the persistent disconnect between talent cultivation in China's financial education and the evolving needs of industry and society. Building on OBE principles, this study analyzes the operational mechanisms and collaborative logic across the entire educational chain, covering enrollment, in-program training, and employment. It systematically identifies core challenges such as misaligned enrollment structures, fragmented curricula, weak industry-education collaboration, and insufficient data support for quality assurance. In response, the paper proposes a five-dimensional integrated approach that includes reverse enrollment profiling guided by employment outcomes, restructuring of a competency-oriented curriculum matrix, construction of an industry-education synergy ecosystem, development of a data-driven information platform, and establishment of dynamic feedback and continuous improvement cycles. Together, these measures aim to build a learning outcome-oriented quality feedback mechanism for finance and economics majors, promote high-quality program development, and offer a systematic pathway for cultivating high-caliber, application-oriented professionals who are better aligned with contemporary financial sector demands.

**Keywords:** outcome-based education; finance education; talent cultivation; curriculum reform; industry-education integration; quality assurance

## 1 Introduction

In the contemporary educational framework, there is a growing emphasis on fostering professionals who possess applied skills, interdisciplinary knowledge, and technical expertise [1, 2]. This focus has significantly increased the expectations for teaching quality, particularly within private higher education institutions. However, traditional models of financial and economics education have struggled to keep pace with the rapid evolution of industries and the dynamic demands of the market. Key challenges include enrollment criteria that fail to align with the actual needs of the industry, training objectives that lack practical relevance, and curriculum designs that do not adequately prepare students for real-world applications. Furthermore, career guidance and development programs often operate in isolation, leading to fragmented support for students as they transition into the workforce. Addressing these issues necessitates the establishment of a comprehensive and systematic mechanism for ensuring education quality [3, 4]. Such a framework would enable institutions to better adapt to industry changes, meet market requirements, and equip students with the skills needed for sustainable career success.

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## 2 Core Principles and Educational Value of the OBE Philosophy

The Outcome-Based Education (OBE) philosophy emerged during a significant wave of educational reform in the 1980s. At its essence, this approach redefines the focus of education by prioritizing the development of students' core competencies upon graduation. These competencies serve as both the foundational starting point and the ultimate measure of success for all educational activities. This represents a transformative shift from traditional "input-oriented" methods, which emphasize the content delivered by educators, to "output-oriented" models that focus on measurable student achievements. Unlike conventional teaching paradigms that center on "what is taught," OBE emphasizes "what is learned" and "what can be applied in practice." This philosophy is built upon three fundamental pillars: the establishment of clearly defined learning outcomes, the design of curricula and instructional methods that are reverse-engineered to achieve these outcomes, and the implementation of continuous assessment mechanisms to evaluate and enhance competency development. The value of this approach lies in its ability to place students at the center of the educational process, fostering personalized learning pathways and promoting inclusive criteria for success. By doing so, OBE provides a robust framework for assessing the quality of talent cultivation while supporting the development of dynamic and open quality assurance systems. In the context of the knowledge economy, this "end-oriented" educational model effectively aligns educational outputs with societal and economic demands, offering critical methodological insights for the establishment of modern educational governance systems [5]. This alignment ensures that education remains relevant and responsive to evolving global and local needs [6].

## 3 Era Characteristics and Development Requirements of Financial and Economic Professional Education

### 3.1 Contemporary Characteristics of Financial and Economic Education Programs

The education system for finance and economics majors is experiencing significant and transformative changes. The emergence of the digital economy has fundamentally altered the landscape of financial industries, leading to the convergence of traditional sectors such as banking, securities, and insurance. Technologies like artificial intelligence are now integral to investment decision-making processes, while blockchain has redefined payment and settlement systems by enhancing security and efficiency. Additionally, big data analytics has become indispensable for advanced risk management strategies. The rapid growth of fintech enterprises has disrupted conventional financial institutions, compelling them to adapt to a more technology-driven environment. Similarly, the accounting profession is undergoing a profound shift, with machine learning algorithms increasingly automating routine auditing tasks. This evolution necessitates that financial analysts prioritize strategic value creation over operational functions. These advancements underscore the urgent need for interdisciplinary professionals who can bridge the gap between traditional financial expertise and modern technological skills. Students in these fields must cultivate a robust theoretical foundation in economics and finance while simultaneously acquiring competencies in data analysis, technical tools, and innovative problem-solving. Furthermore, the accelerating trend of internationalization has expanded cross-border investment and financing activities, accompanied by frequent changes in regulatory frameworks. Professionals in this domain must be adept at interpreting evolving policy landscapes and responding swiftly to dynamic global conditions. However, traditional education models often produce graduates with narrowly focused knowledge bases, which limits their ability to navigate the complexities of modern financial environments. To address these challenges, educational institutions must prioritize the development of versatile, forward-thinking talent capable of thriving in an increasingly interconnected and technologically advanced world.

### 3.2 Development Requirements for Financial and Economic Professional Education

The evolving demands of the modern era necessitate significant reforms in financial education, emphasizing the cultivation of well-rounded competencies over mere knowledge acquisition. Educational programs must ensure that students not only grasp fundamental theories but also develop the ability to address practical challenges effectively. To achieve this, curriculum design should break away from traditional disciplinary silos, incorporating insights from fields such as computer science, statistics, psychology, and other relevant domains into finance-related studies. This interdisciplinary approach equips students with a broader skill set, enabling them to adapt to complex, real-world scenarios. Teaching methodologies also require a paradigm shift, with greater emphasis on case-based learning, project-driven activities, and practice-oriented strategies that mirror actual industry practices [7–9]. Collaboration between academia and industry must deepen, transitioning from surface-level partnerships to meaningful integration, where students gain hands-on experience by engaging in real corporate operations. Evaluation systems should evolve to focus on a holistic assessment of student performance, emphasizing developmental potential and practical competencies rather than relying solely on traditional exam scores. Personalized education is becoming increasingly important, as students possess diverse interests, strengths, and career goals. Flexible learning pathways tailored to individual needs can better prepare students for their future careers. Furthermore, fostering international exchanges and cooperation is vital for developing global perspectives and enhancing cross-cultural communication skills. These comprehensive reforms aim to produce highly skilled financial professionals who are well-equipped to address the dynamic needs of society and contribute meaningfully to the global economy.

#### **4 Design of Collaborative Mechanism and Quality Feedback Path for Finance Majors Based on OBE Philosophy**

##### *4.1 Reverse Design to Build Outcome-Oriented Enrollment Profiles*

To develop admission profiles for finance and economics programs guided by the Outcome-Based Education (OBE) philosophy, institutions must move beyond traditional exam-oriented education frameworks. The core competency framework of graduates should act as the central anchor for systematically redesigning admission criteria. The ultimate aim of cultivating finance professionals is to produce interdisciplinary talents equipped with data insight, business acumen, global perspective, and innovative thinking. Admission processes should be structured around these expected outcomes, incorporating diverse evaluation dimensions and assessment tools tailored to specific program objectives. Universities need to establish mechanisms for recognizing a broad range of competencies, transitioning from static academic evaluations to dynamic assessments of practical skills and abilities. For example, financial engineering programs could organize quantitative investment strategy competitions where applicants develop portfolios using mathematical modeling and programming skills. This approach evaluates mathematical logic, innovative application capabilities, and problem-solving skills. Financial management programs might conduct corporate financial diagnosis case analyses, requiring students to assess financial conditions and design improvement plans based on real enterprise data, thereby identifying analytical thinking and decision-making abilities. International business programs could integrate cross-cultural business project planning components during admissions to assess global perspectives and adaptability in diverse cultural contexts. Furthermore, admission profiles should include evaluations of students' character traits and developmental potential, emphasizing qualities such as integrity, responsibility awareness, and self-motivation. Accounting programs could adopt professional ethics scenario judgment tests to assess students' ability to uphold values in conflict-of-interest situations. Auditing programs might incorporate tasks such as detail observation and logical reasoning to evaluate professional sensitivity and foundational competencies. By implementing these targeted admission strategies, institutions can select high-quality candidates who align closely with the program's

developmental objectives. This approach lays a solid foundation for personalized design and precise guidance in subsequent training processes, ensuring that graduates are well-prepared to meet the demands of the evolving financial industry.

#### *4.2 Integration and Restructuring: Building a Competency-Based Curriculum Matrix*

The establishment of a curriculum matrix for finance and economics programs under the Outcome-Based Education (OBE) philosophy necessitates a systematic restructuring process that is guided by core competency elements. To begin, it is crucial to clearly define the key competencies that graduates are expected to possess. These include data analysis skills, the ability to identify and manage risks, proficiency in making investment decisions, expertise in financial management, and a strong foundation in business acumen [10–12]. These competencies form the cornerstone of curriculum design, ensuring that the educational framework aligns with the practical demands of the industry. Building on this foundation, previously fragmented course modules should be integrated into cohesive, competency-oriented clusters. For example, courses such as statistics, econometrics, big data analytics, and Python programming can be consolidated into a "Data Intelligence Analysis" cluster. Similarly, corporate finance, investment studies, derivatives pricing, and behavioral finance can be grouped into an "Investment Decision-Making and Risk Management" cluster. Within these clusters, project-based teaching methods should be employed, with instructional tasks designed to simulate real-world business scenarios. For instance, students may be tasked with applying knowledge from multiple courses to execute comprehensive corporate valuation projects or develop portfolio optimization strategies. The organization of course content follows a "spiral progression" principle, where the same competency elements are revisited and deepened across different semesters and courses. This approach ensures that students build upon their foundational knowledge in a structured and progressive manner. Additionally, a collaborative mechanism between courses should be established, with instructors holding regular coordination meetings to ensure seamless content integration and the progressive development of competencies. The evaluation model has also evolved to focus on competency-based assessment. Each course specifies clear weightings for corresponding skill indicators, and students' final grades reflect not only their mastery of theoretical knowledge but also their ability to apply this knowledge in complex, real-world scenarios. This matrix-based curriculum framework transcends traditional course boundaries, achieving a seamless integration of knowledge transmission, skill development, and holistic competency enhancement, thereby preparing students to meet the multifaceted challenges of the finance and economics sectors.

#### *4.3 Deep Integration of Industry and Education to Build a Holistic Collaborative Educational Ecosystem*

The depth and breadth of industry-academia integration play a pivotal role in determining the effectiveness of talent cultivation within finance-related disciplines. To achieve this, industry-academia collaboration should be firmly rooted in principles that prioritize expected learning outcomes as the central framework. A comprehensive collaborative education model must be established, involving both academic institutions and enterprises in a synergistic partnership. This model should ensure that enterprises actively participate in all critical decision-making processes, including setting educational objectives, designing curriculum content, and implementing practical training programs. By fostering a "dual-subject" collaborative governance mechanism, responsibilities and achievements can be equitably shared between academia and industry, creating a balanced and effective partnership. For example, collaborations with leading financial institutions to establish "Digital Finance Innovation Experimental Classes" could involve forming hybrid faculty teams. These teams, composed of corporate experts and university professors, would jointly develop specialized training programs and deliver core courses tailored to industry needs. In practical education, traditional "cognitive internships" should be replaced with immersive industry practice models. These models allow students to develop professional skills by engaging in real business scenarios. Initiatives

such as "corporate workshops" can provide students with opportunities to assume roles like bank client managers or accounting firm auditors, working on challenging projects under the guidance of experienced mentors. Additionally, the creation of "project-based learning platforms" can transform real corporate needs into structured learning tasks. This approach enables students to enhance their comprehensive competencies through hands-on problem-solving. For instance, undertaking projects such as financial analysis, investment decision-making evaluations, and market research fosters a dynamic cycle of "learning by doing and doing by learning." Furthermore, a "two-way flow" faculty exchange mechanism should be implemented. This would involve university teachers gaining on-the-job training in enterprises while industry experts are recruited as adjunct professors, ensuring seamless integration of theoretical knowledge and practical application. The evaluation model must also reflect the unique characteristics of industry-education integration. Multidimensional assessment criteria should be established, incorporating feedback from corporate mentors, project outcomes, and evaluations of professional competencies. This ensures that students achieve the desired learning outcomes throughout the integration process, thereby equipping them with a solid foundation for future employment and career advancement.

#### *4.4 Data Integration: Establishing a Full-Process Tracking Information Platform*

The development of an educational information platform for finance and economics programs, grounded in the Outcome-Based Education (OBE) philosophy, requires the establishment of a robust and comprehensive data flow model. This model must encompass the entire educational journey, from enrollment to career outcomes, ensuring seamless integration of diverse data sources. These sources include student learning portfolios, course progress records, internship documentation, and employment tracking information. By leveraging big data analytics, the platform can facilitate the creation of dynamic competency modeling mechanisms. For example, performance metrics from core professional courses can be analyzed in conjunction with employer evaluations, thesis quality assessments, and job placement outcomes to determine the impact of various learning pathways on academic and professional achievements. To achieve this, the data collection module should be embedded within educational management systems, enabling real-time monitoring and analysis of student learning behaviors. Online learning platforms can gather detailed data, such as levels of knowledge mastery, time allocation patterns, and interaction frequency. This data can then be integrated with midterm and final exam results, as well as assignment quality, to construct predictive models that assess learning effectiveness. Furthermore, the platform must establish collaborative data-sharing mechanisms with employers to collect ongoing feedback on graduates' career trajectories, job performance, and continuing education requirements. This approach supports the creation of a long-term evaluation system for educational outcomes. Advanced machine learning algorithms should be employed to identify key factors influencing student competency development, providing a scientific basis for designing personalized training programs. For instance, such analysis can reveal disparities in learning outcomes among students from diverse backgrounds in critical competency areas like quantitative analysis, financial modeling, and investment decision-making. This enables educators to refine instructional strategies and guide students in optimizing their learning pathways. Additionally, the platform should incorporate visualization tools to transform complex data analyses into intuitive charts and reports [13]. These visualizations allow educational administrators, instructors, and students to monitor learning progress effectively, facilitating transparent management and enabling targeted interventions throughout the educational process. By integrating these features, the platform can significantly enhance the quality and relevance of education in finance and economics programs.

#### *4.5 Dynamic Feedback to Form a Multi-Loop Improvement Closed System*

The quality feedback mechanism for finance and economics programs based on the Outcome-Based Education (OBE) philosophy necessitates the establishment of a

comprehensive evaluation framework that integrates multiple dimensions, including student learning outcomes, faculty teaching effectiveness, curriculum design, and industry relevance. Central to this system is the real-time monitoring of student performance, which requires a dynamic assessment framework incorporating diverse indicators such as mastery of knowledge, proficiency in skill application, and development of comprehensive competencies. For example, finance programs can define specific evaluation dimensions such as portfolio analysis capabilities, risk identification skills, and financial product innovation design competencies. These dimensions can be assessed through the regular collection of performance data from students engaged in simulated transactions, case analyses, and internships, ensuring a practical and applied approach to learning. Faculty teaching improvement should be guided by multi-source evaluation data gathered from students, peers, and supervisory experts. This data can be used to establish quantitative assessment systems focusing on critical elements such as the effectiveness of teaching methodologies, the relevance of curriculum content, and the quality of teacher-student interactions. External feedback from corporate recruiters provides a direct validation of program effectiveness, requiring robust tracking mechanisms to evaluate graduate competencies, alignment of skills with industry demands, and their capacity for continuous learning. For instance, accounting programs can benefit from regular performance evaluations conducted by accounting firms, financial institutions, and corporate finance departments. These evaluations can assess graduates' practical capabilities in key business areas such as audit practices, financial analysis, and tax planning, ensuring alignment with professional standards. Effective utilization of quality feedback depends on the establishment of rapid-response improvement mechanisms that allow for swift adjustments to curriculum content, teaching methods, or practical components when competency gaps are identified. Detailed analysis of feedback data can uncover systemic issues within talent development processes, providing a scientific basis for professional development planning, faculty team building, and resource allocation. This approach fosters a virtuous cycle model of "evaluation-diagnosis-improvement-re-evaluation," ensuring continuous enhancement in the quality of talent cultivation within finance and economics disciplines.

## 5 Conclusion

In conclusion, the OBE-based "admission-cultivation-employment" linkage mechanism for finance and economics programs represents a transformative approach to addressing persistent challenges in educational quality. By redefining the logical relationships within the educational process, this mechanism shifts from fragmented and isolated management practices to a more cohesive and collaborative framework. This integrated approach not only enhances the alignment between academic training and industry demands but also fosters a more dynamic and responsive educational ecosystem. Universities are encouraged to actively explore and implement strategies that align with their unique institutional characteristics, ensuring that these mechanisms are adaptable and effective in diverse contexts. Furthermore, the continuous improvement of quality feedback systems is critical to sustaining long-term success. Looking ahead, it is imperative to deepen the integration of industry and education, leveraging advancements in digital technologies to empower learning environments. These efforts will collectively drive finance and economics education toward achieving higher levels of innovation, relevance, and quality in an ever-evolving global landscape.

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