



Empowering Innovation Capability in Master of International Business through Industry - Education Integration: Reform and Practice of the Shanghai Model

Chan He Xu Xu

Shanghai Dianji University, China

* Corresponding Author: **Chan He Xu Xu**

Article Info

ISSN (Online): 2582-7138

Impact Factor (RSIF): 7.98

Volume: 06

Issue: 05

September - October 2025

Received: 01-08-2025

Accepted: 02-09-2025

Published: 31-09-2025

Page No: 548-552

Abstract

This study explores how industry–education integration can effectively enhance the innovation capability of Master of International Business (MIB) students, identifies key issues in the current training model, and proposes reform strategies based on practices in Shanghai. Through questionnaire surveys administered to 32 foreign trade enterprises and 5 universities in Shanghai (N = 417), combined with case studies and policy analysis, three major dilemmas and their root causes in MIB innovation cultivation are identified. The findings reveal insufficient motivation for multi-agent collaboration, low efficiency in resource integration, and a lack of long-term mechanisms. In response, a systematic reform framework—"Demand Anchoring – Dual-Subject Platform – Fault Tolerance Mechanism"—is proposed. By implementing enterprise-led projects, co-constructed platforms, and policy safeguards, Shanghai has effectively addressed superficial collaboration in industry–education integration, providing a replicable and scalable model for MIB education nationwide.

Keywords: Master of International Business (Mib), Industry–Education Integration, Innovation Capability Cultivation, Training Model Reform, Shanghai Practice, University–Enterprise Collaboration

1. Introduction

Against the backdrop of restructuring global value chains and the rapid rise of digital trade, the cultivation of Master of International Business (MIB) students must evolve from knowledge transmission to fostering globally oriented innovative capabilities. The State Council's Several Opinions on Deepening Industry–Education Integration explicitly calls for aligning academic disciplines with industrial transformation and upgrading. Given the cross-border, practical, and dynamic nature of international business, industry–education integration is essential to bridge the gap between talent development and global industrial needs ^[1]. Although existing research acknowledges the value of such integration—for instance, Zhang *et al.* ^[2] developed a "competition–R&D" dual-driven model for cultivating tech talent in the Guangdong–Hong Kong–Macao Greater Bay Area, and Wang *et al.* ^[3] enhanced the practical abilities of engineering students through STEM—studies focusing on MIB remain limited in three aspects: insufficient cross-border collaboration, disconnection in cultivating international competencies, and the absence of sustainable mechanisms ^[4–6].

Scholars have actively explored these issues. For example, Liu *et al.* ^[7] demonstrated that blending online resources with offline practice can increase university–industry collaboration (UIC) intensity by 23%, indirectly promoting innovation capability. Kong *et al.* ^[8] reported a 40% increase in student patent outputs in food engineering through a "disciplinary competition–enterprise platform" model. Zhang Mingyue ^[9] proposed a four-dimensional learning model integrating knowledge, skills, psychology, and practice. However, most studies focus on engineering or general innovation education, neglecting the specific needs of MIB students, who require cross-cultural communication, global market insight, and digital trade innovation capabilities.

To address these gaps, this study constructs a tailored framework for MIB innovation cultivation: "International Demand Anchoring – Cross-border Dual-Subject Platform – International Fault Tolerance Mechanism." This "Shanghai Approach"

drives global resource integration and supports iterative innovation in international business, offering a replicable reform path for MIB education nationwide.

The paper is structured as follows: Section 1 analyzes the causes of three major dilemmas in industry–education integration; Section 2 elaborates the reform model based on demand anchoring, dual-subject platforms, and a fault-tolerant mechanism; Section 3 validates the model's effectiveness using pilot data from Shanghai universities; and Section 4 summarizes scalable implementation strategies. This research provides empirical support for addressing superficial collaboration in industry–education integration and facilitates the transformation of international business talent from passive adaptation to active innovation.

2. Major Issues in Cultivating MIB Innovation Capability through Industry–Education Integration

2.1. Lack of Motivation among Participating Entities

The lack of engagement from various stakeholders stems primarily from misaligned objectives and inadequate incentive mechanisms. Enterprises, driven by short-term profits, find it challenging to commit to long-term talent development. For instance, cross-border e-commerce or manufacturing companies face rapidly changing international markets, while joint training programs typically last 1–2 years. Without effective cost compensation or risk-sharing mechanisms—especially in complex scenarios involving overseas operations and international compliance—companies are reluctant to sustain participation. Corporate mentors, due to insufficient incentives, rarely engage deeply in curriculum design or teaching evaluation. A 2025 survey by the Shanghai Municipal Commission of Commerce revealed that only 32% of corporate mentors had participated in course design or assessment, particularly in core MIB courses such as international trade practices, cross-cultural negotiation, and global investment decision-making. Consequently, misaligned goals and institutional gaps result in a situation where "universities are enthusiastic, enterprises are cold, instructors are exhausted, and students are lost."

2.2. Ineffective Integration of University–Enterprise Innovation Resources

Ineffective integration of innovation resources is reflected in outdated curricula, weak platform functionality, and insufficient collaboration between instructors. Core MIB courses such as international settlement and cross-border e-commerce often fail to incorporate emerging topics like blockchain-based cross-border payments, digital geo-risk management, global supply chain resilience, and ESG compliance. Furthermore, 83% of practical training bases offer only entry-level positions and prohibit student involvement in international business process improvement, overseas market entry strategy development, or core 跨国 management projects. Dual mentors with international business expertise are significantly underutilized in key teaching activities: enterprises participate in developing less than 40% of MIB training plans, and only 35% of innovation projects have practical international market value, indicating a disconnect from real-world industrial challenges.

This inefficiency in resource integration stems fundamentally from the lack of collaborative mechanisms and imbalanced benefit distribution, calling for dynamic curriculum updates, platform enhancements, and redesigned incentive structures for instructors.

2.3. Absence of a Long-Term Mechanism for Innovation Capability Cultivation

A major challenge in current innovation and entrepreneurship education is the lack of sustainable mechanisms, manifested in unrealistic evaluation criteria and an absence of fault-tolerant policies. Overreliance on idealized indicators such as business plan competitions leads to a significant gap between project design and practical feasibility. More critically, the lack of a systemic fault tolerance mechanism means that innovation failures often negatively impact academic assessments. As one instructor from Donghua University noted: "If students engage in high-risk technological innovation and fail, it directly affects their thesis evaluation and defense results, greatly discouraging experimental trial and error." This rigid link between innovation risk and academic evaluation stifles the exploratory process essential for original innovation.

3. Causes of the Dilemmas in Cultivating MIB Innovation Capability in Shanghai

3.1. Conflicting Core Demands among Innovation Entities

Universities, enterprises, and students have misaligned goals, leading to dispersed resources and reduced efficiency. Enterprises focus on practical business challenges—for example, cross-border e-commerce firm SHEIN needs solutions to consumption fluctuations caused by religious and cultural differences in Southeast Asia. Universities, however, often prioritize competition awards and academic publications; many institutions use the number of "Internet+" gold awards as a key discipline evaluation metric, pressuring instructors and students to shortcut industry needs research in favor of idealized projects that are more likely to win awards. Students seek practical innovation training, as illustrated by the East China University of Science and Technology's "Cool Link" team, which spent three months researching dozens of automotive companies in the Yangtze River Delta to develop a cooling technology for charging guns, ultimately securing orders worth RMB 2 million. Nevertheless, misalignment among the three parties often results in disjointed projects. This conflict originates from imbalanced evaluation systems and resource allocation. In university faculty promotion and discipline evaluations, business competition awards carry more weight than practical technology implementation. Enterprises, wary of long cycles and high risks in university technology transfer, prefer collaborating with established technology providers. Data show that in 2024, only 32% of Shanghai's industry–university–research projects were led by universities, and 76% of these were enterprise-commissioned targeted development, leaving little room for original innovation. There is an urgent need to establish a "demand–R&D–evaluation" closed loop, such as the model at East China Jiaotong University where enterprises pose challenges, universities develop solutions, and students implement them. This approach has yielded seven national competition awards and a 100% technology transfer rate over the past three years.

3.2. Dual Lag in Real-World Scenarios and Digital Tools

Limited access to real-world scenarios leads to innovation detached from industrial reality. Compared to Beihang University's "School of Excellence in Engineering," which integrates directly with aerospace R&D production lines, Shanghai students often work only with simulated environments. A professor from East China Normal

University noted: "In cross-border live streaming courses, students cannot access real-time data from TikTok's Southeast Asia region, having to rely on historical samples. This results in marketing strategies for religious holidays that severely deviate from actual traffic fluctuations." This disconnect is more pronounced in engineering fields; for example, a smart factory project at one university could not access multi-source heterogeneous data from industrial sites, leading to a 37% false alarm rate when the model was deployed.

Outdated digital tools widen this gap. Enterprises often refuse to open core system interfaces due to data security concerns, forcing students to use outdated software or simulation platforms. For instance, a new energy team analyzing charging pile operation and maintenance data could only use desensitized static datasets, failing to capture real-time fault chains. Their early warning system had a missed detection rate twice the industry standard.

3.3. Lack of a Long-Term Mechanism for Innovation Capability Cultivation

The absence of clear exemption clauses at the policy level exacerbates risk aversion. Although the Shanghai Vocational Education Regulations encourage university–enterprise collaboration, they lack provisions for exempting liability in innovation failures. Enterprises fear international technology leaks, cross-border project delays, or violations of host country regulations, leading them to avoid high-risk collaborations. A 典型案例 involved a university–enterprise project on hydrogen fuel cells for the European market: when pilot testing revealed material stability issues and potential EU environmental regulatory risks, the enterprise held the student team liable based on the contract, resulting in

financial penalties and delayed graduation.

Misaligned evaluation systems further discourage trial and error. Universities commonly use "solution perfection" as a key innovation metric. As one Donghua University supervisor stated, "If students participate in high-risk technological innovation and fail, it directly affects their thesis evaluation and defense results." Southwest Jiaotong University implements an "innovation one-vote veto system," where 5% of doctoral applicants in the past three years faced delays due to insufficient innovation. Among four problematic theses identified by Xiamen University in 2021, "lack of innovation" was a major flaw. This results-oriented rather than process-oriented evaluation system suppresses the willingness to explore unknown international markets and develop new cross-border business models, hindering students from engaging with global business challenges.

4. Causes of the Dilemmas in Cultivating MIB Innovation Capability in Shanghai

Industry–education integration is a key pathway to resolving the disconnection between talent cultivation and industrial needs. Its core lies in establishing long-term university–enterprise collaboration mechanisms. Based on pioneering practices such as Shanghai's "Da Linghao Bay" and the "Huawei Class," this paper proposes three innovative mechanisms: demand anchoring, a dual-subject platform, and a trial-and-error tolerance mechanism. Through systemic reforms such as enterprise-led projects, ability certification, and enterprise residency programs, these strategies promote deep integration of the education chain, talent chain, industry chain, and innovation chain. Each mechanism is supported by case studies and policy references, providing replicable implementation models, as illustrated in Figure 1.

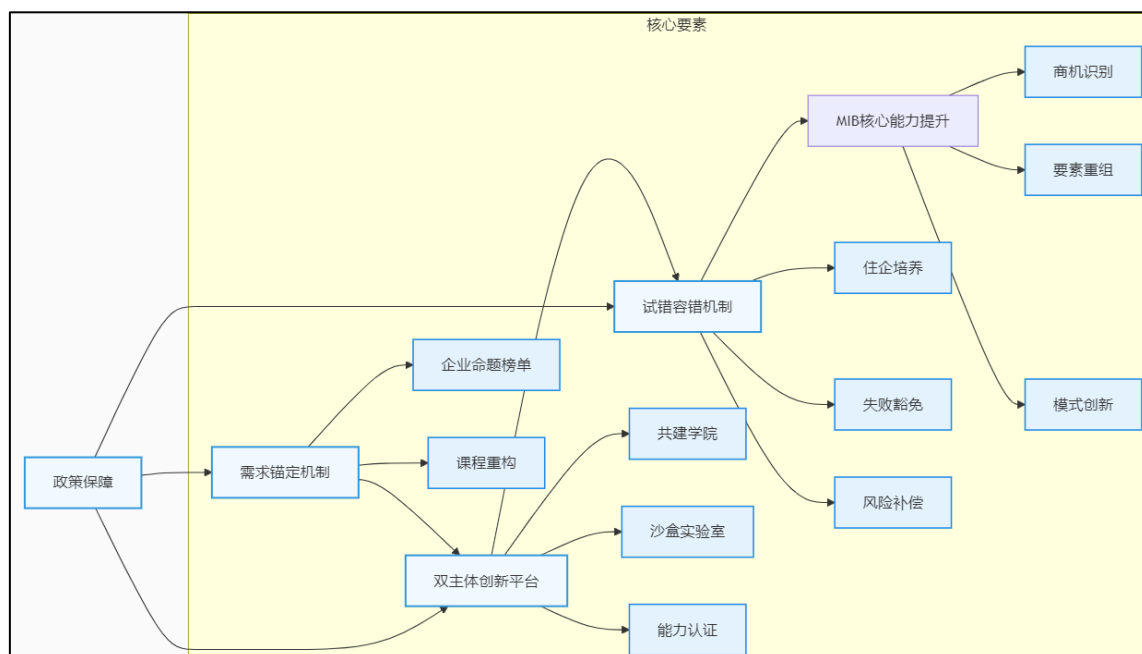


Fig 1: Schematic diagram of the framework for breaking through the predicament and reform strategies

4.1. Demand Anchoring Mechanism: Enterprise-Led Projects and Curriculum Restructuring

Enterprise-led project initiatives are the starting point for industry–education integration. Following the model of Central China Normal University's "Huawei ICT Academy," enterprises engage deeply in the entire talent cultivation

process: since 2020, the university has selected 45 outstanding undergraduates each year for the "Huawei Curriculum Base Class," where Huawei engineers serve as deputy directors and integrate cutting-edge technologies such as Kunpeng processors and Ascend AI into 21 core courses. Student teams have won five global grand prizes in the

Huawei ICT Competition. Similarly, Shanghai Jiao Tong University's Future Technology School collaborates with CATL to cultivate master's students, focusing on sustainable energy and health technology. Enterprise experts set project scoring criteria (with commercial value accounting for over 60% of the weight), ensuring that projects address real industrial pain points. This model has been extended to companies such as Fosun Group, which publishes "cross-

border supply chain optimization" challenges that are directly incorporated into student graduation projects.

Curriculum restructuring must break down disciplinary barriers. Drawing on cases from the Shanghai Pilot Free Trade Zone and SAIC Motor, traditional courses are transformed into interdisciplinary offerings. Table 1 compares traditional and reformed courses:

Table 1: Comparison Between Traditional and Reformed Courses

No.	Traditional Course	Reformed Course	Enterprise Case Source
1.	International Trade Practices	Digital Trade Risk Management	Shanghai Pilot Free Trade Zone Database
2.	International Logistics Management	Carbon-Neutral Supply Chain Innovation	SAIC Motor EU Practices

Such reforms have been validated at the "Da Linghao Bay Craftsman College," which offers 150 enterprise-tailored courses covering 16 fields including artificial intelligence and biomedicine. A faculty of 129 industry experts matches enterprise needs through a "booking invitation" mechanism. Course design follows a "theory–practice–competition" trinity logic.

4.2. Dual-Subject Innovation Platform: Co-Established Colleges and Ability Certification

The governance structure of industry–education integration must emphasize the role of enterprises. Shanghai's Da Linghao Bay Innovation College (Minhang Vocational and Technical College headquarters) adopts a "board of directors responsibility system" and establishes two types of platforms. One is Enterprise Innovation Mentor Studios. Introduce technical backbones from leading enterprises (such as Huawei, Douyin Overseas TikTok, and Fosun Global Healthcare) to be responsible for the international market or technical standards. The another one is Policy Sandbox Laboratories, which focus on simulating international rules such as RCEP/CPTPP changes, new cross-border data regulations (e.g., GDPR), and international sanctions and trade barriers. For example, the Henan Pilot Free Trade Zone conducts stress tests on a "white list for cross-border data flow (aligned with international standards)," allowing students to validate cross-border payment and digital trade solutions involving multiple jurisdictions in a controlled environment. Training base cases are selected to address actual challenges in international operations.

The Innovation Capability Certification System, constructed based on the Huawei ICT Academy capability model, is designed to systematically ensure quality within the dual-subject platform. This certification framework comprises three core metrics: Opportunity Identification (40% weight), measured by the "business opportunity conversion rate" and assessed by enterprises for commercial feasibility; Resource Reconfiguration (30% weight), which evaluates the efficiency of resource optimization through joint scoring by academic and corporate mentors—for instance, CATL mentors quantify improvements in resource utilization within battery recycling solutions; and Model Innovation (30% weight), gauged by the "solution survival period" and tracked by regulatory bodies over a 12-month operational cycle to verify sustainability. Certification outcomes are interoperable with academic credits; for example, students in the Huawei Base Class may exempt themselves from corresponding courses such as Cloud Computing upon certification.

4.3. Trial-and-Error Tolerance Mechanism: Enterprise Residency and Policy Safeguards

Enterprise residency programs are key to reducing innovation risks. Donghua University's "Enterprise Sword Casting" program requires graduate students to work in international business departments or overseas branches for ≥ 18 months. During this period, an "innovation failure exemption" policy applies: if project losses are $< 20\%$ and primarily due to uncontrollable risks such as sudden policy changes in target markets, cross-cultural conflicts, international supply chain disruptions, or technical verification uncertainties, the results are not recorded in the student's file. Enterprises can still claim up to RMB 500,000 per student in training subsidies. This mechanism is further refined at Shanghai Jiao Tong University's Future Technology School: students participating in battery material development projects at CATL's European or North American research institutes are recognized for effective R&D outcomes if pilot testing data completeness exceeds 80%, even if energy density falls short of expectations. Students receive technical contribution certification from the enterprise.

Policy safeguards should encompass both fiscal support mechanisms and risk mitigation frameworks. In accordance with Article 42 of the Shanghai Science and Technology Innovation Regulations, enterprises are eligible for a "three-year full exemption followed by a three-year 50% reduction" in corporate income tax. Simultaneously, an innovation risk compensation fund of RMB 1 billion has been established to provide tiered compensation based on the amount of loss incurred:

- **Tier 1:** Losses \leq RMB 5 million qualify for 70% compensation;
- **Tier 2:** Losses between RMB 5 million and RMB 20 million qualify for 50% compensation;
- **Tier 3:** Losses $>$ RMB 20 million qualify for 30% compensation.

Additionally, the Henan Pilot Free Trade Zone conducts "sandbox supervision" pilots, allowing university–enterprise innovation projects in fintech and cross-border data services to test beyond current regulatory frameworks. A circuit breaker mechanism is triggered if systemic risks arise.

5. Conclusion

This study addresses the core issue of enhancing MIB innovation capability through industry–education integration. Based on survey data from 32 foreign trade enterprises and 5 universities in Shanghai ($N = 417$), it

identifies three major dilemmas in the current training model and their causes: lack of motivation among entities, inefficient resource integration, and absence of long-term mechanisms. These are attributed to misaligned goals, insufficient incentives, outdated curricula, weak platform functionality, disengaged instructors, unrealistic evaluation criteria, and lacking fault-tolerant policies.

In response, the "Shanghai Approach" proposes three core reform strategies:

A demand anchoring mechanism led by enterprises (e.g., Fosun's "cross-border supply chain optimization" challenges integrated into graduation projects) and deeply restructured curricula (e.g., Shanghai Pilot Free Trade Zone cases incorporated into "Digital Trade Risk Management" courses).

A dual-subject innovation platform with co-established 实体 platforms (e.g., Da Linghao Bay Innovation College's board-led structure, enterprise mentor studios, and policy sandbox labs) and an enterprise-informed ability certification system (e.g., the Huawei ICT model, assessing business opportunity conversion, resource optimization, and solution sustainability), enabling credit interchange.

A trial-and-error tolerance mechanism featuring enterprise residency (e.g., Donghua University's "Enterprise Sword Casting" program with ≥ 18 -month placements and exemptions for certain technical failures) supported by policies (e.g., Shanghai's "three exemptions and three halvings" tax incentives, a RMB 10 billion risk compensation fund, and Henan's "sandbox 监管" pilot).

By constructing a systematic framework of "demand anchoring – dual-subject platform – fault tolerance mechanism," this study effectively addresses superficial industry–education integration, providing a replicable practice path for MIB cultivation nationwide and facilitating the transition of international business talent from passive adaptation to active innovation. The Shanghai practice demonstrates that deepening university–enterprise collaboration and strengthening institutional safeguards are key to enhancing MIB innovation and entrepreneurship capabilities.

6. Reference List

1. General Office of the State Council. Several opinions on deepening industry–education integration [Internet]. Beijing: General Office of the State Council; 2024 [cited 2024]. Available from: <http://www.gov.cn>.
2. Zhang JM, Lou YJ, Chen HY, *et al.* Exploration and practice of cultivating innovation and entrepreneurship ability of scientific and technological talents in the Guangdong–Hong Kong–Macao Greater Bay Area. *Univ Educ.* 2025;(4):6-9.
3. Wang GJ, Zhang ZJ, Wei H, *et al.* Case analysis of innovation and entrepreneurship ability cultivation of postgraduate students based on STEM under the background of emerging engineering education. *Yunnan Chem Technol.* 2024;51(4):162-6. doi:10.3969/j.issn.1004-275X.2024.04.39.
4. Wu ZC, Li AQ. Research on the training mode of innovation and entrepreneurship ability for postgraduate students in tourism management. *Innov Entrep Theory Res Pract.* 2022;(24):117-9.
5. Zheng C, Sun L, Guo H. RETRACTED: Construction of innovation and entrepreneurship education ecosystem in higher vocational colleges from the perspective of

system theory. *Wirel Commun Mob Comput.* 2022;2022:5805056. doi:10.1155/2022/5805056.

6. Liu XM, He ZL, Zhang HL, *et al.* Exploration and practice of innovation and entrepreneurship ability training mode based on "Double First-Class" and "Mass Entrepreneurship and Innovation"—taking postgraduate students of resources and environment as an example. *Pop Sci Technol.* 2022;24(11):122-5.
7. Liu Z, Xiong C, Xie D. Application of the online and offline blended learning mode in innovation and entrepreneurship education. In: *Proceedings of 2020 IEEE International Conference on Teaching, Assessment, and Learning for Engineering (TALE); 2020 Dec 8-11; Takamatsu, Japan. Piscataway (NJ): IEEE; 2020. p. 803-6. doi:10.1109/TALE48869.2020.9368408.*
8. Kong X, Zeng Q, Guo X, Kong F. Sustainable cultivation of discipline competition programs for innovation and entrepreneurship education: an example of the food science and engineering major. *Sustainability.* 2024;16(14):5846. doi:10.3390/su16145846.
9. Zhang MY. Research on multi-dimensional learning promotion training mode for innovation and entrepreneurship ability of master of art design. *J Suzhou Art Des Technol Inst.* 2024;(4):36-40.